

# Oracle Fusion Cloud Project Management

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## **Using Project Performance Reporting**

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Oracle Fusion Cloud Project Management  
Using Project Performance Reporting

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# Get Help

There are a number of ways to learn more about your product and interact with Oracle and other users.

## Get Help in the Applications

Some application pages have help icons  to give you access to contextual help. If you don't see any help icons on your page, click your user image or name in the global header and select Show Help Icons. If the page has contextual help, help icons will appear.

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# 1 Project Performance Reporting

## Tolerance Percentage

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's used to determine the trend indicator for a KPI. The percentage change in KPI value is calculated using the following formula:

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

This table describes how the application uses tolerance percentage 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 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

## Financial Plan Types Included in Summarization

Approved forecast and baseline budget versions of the following financial plan types are included in the summarization of project performance data by default.

- 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.

## Additional Financial Plan Types Included in Summarization

Apart from the financial plan types that are included in the summarization by default, you can manually include up to four financial plan types 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 financial plan type only until the 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

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

You can view the following trends:

Trend	What Does It Indicate
Up, favorable	An increasing KPI value is favorable to the project.
Up, unfavorable	An increasing KPI value is unfavorable to the project.
Down, favorable	A decreasing KPI value is favorable to the project.
Down, unfavorable	A decreasing KPI value is unfavorable to the project.
Unchanged	No change to the KPI value.

In the Setup and Maintenance work area, use the **Manage Trend Indicators** task to change the default sort order of the trend indicators. Based on this sort order, the KPIs are listed in the KPI Watchlist region in the Project Performance Dashboard.

## Example of KPI Thresholds with Different Currencies

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 Project Performance Reporting

### What budgets and forecasts are included in the 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 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

### Project Performance Data Summarization

Project managers, project application administrators, and project administrators can run the Update Project Performance Data process to summarize performance data for a project unit, business unit, a range of projects, or the projects managed by a project manager.

The Update Project Performance Data process:

- Summarizes data for different data sources, such as actual costs, commitments, contract revenue, invoice amounts, budgets, control budgets, allocations, forecasts, and awards.
  - Summarizes data in the project currency, project ledger currency, and transaction currency.
  - Summarizes data in the accounting and project accounting calendars.
  - Summarizes contracts.
- Generates KPI values and determines the overall project health status.
- Updates the financial project plan with summarized amounts from actual cost transactions.
- Updates Oracle Essbase cubes so that you can view the summarized data using Oracle Smart View for Office.

### Summarized Data

Use the summarized data to analyze the health of projects and drill down to the causes of any deviation from set thresholds.

You can use summarized data to:

- Analyze project performance.
- Analyze KPI categories and KPIs.
- Track project health and progress across different periods.
- View summaries for revenues, invoices, actual costs, budgets, allocations, forecasts, and commitments.

**Note:** On the Review Project Performance page, the transfer order commitments are reported as part of Other Commitments. That is, the ITD Transfer Order Committed Cost is reported as part of ITD Other Committed Cost, the PTD Transfer Order Committed Cost is reported as part of PTD Other Committed Cost, and so on.

- Build dashboards and analyses to review project performance using the Projects - Performance Reporting Real Time subject area.
- Create reports using Oracle Smart View for Office.

## When to Run the Update Project Performance Data Process

You can run the Update Project Performance Data process for different situations. For example, run it when:

- The summarized data is out of date and you want to update it. For example, if you don't see the latest summarized data in the Project Management infolets, in the Project Performance Dashboard regions, or in the My Projects page.
- Large volume of data isn't summarized yet, and you want to summarize the entire data in one run.

**Note:** If you have large volumes of data, run the Update Project Performance Data Without Producing Report process when the workload is low. For example, you can run the process on a nightly basis.

The following processes run as part of the Update Project Performance Data process and summarize data. So, don't run these processes if you're running the Update Project Performance Data process:

Process	Notes
Distribute Project Resource and Task Effort by Day	None.
Update Project Contract Performance Data or Update Project Contract Performance Data Without Producing Report	The Update Project Performance Data process or the Update Project Contract Performance Data process summarizes project and contract performance data. Submit or schedule either of these processes without specifying any parameters that determine the range of projects or contracts for the process. You must leave any such parameters (for example, project unit, business unit, and so on) blank so that the application can summarize the eligible projects and contracts.
Generate KPI Values or Generate KPI Values Without Producing Report	The Update Project Performance Data process doesn't spawn a separate subprocess for generating KPIs, and generates KPI values as part of the process. If you don't want the process to generate these values, set the <b>Calculate KPI Values</b> field to <b>No</b> . Doing so allows you to avoid unnecessary KPI calculations, reducing overall process runtime, especially for frequent UPPD executions.
Update Award Project Performance Data Without Producing Report	None.
Update Project Plan Data or Update Project Plan Data Without Producing Report	If the <b>Enable automatic pushing actual to project plan after every online cost summarization</b> profile option is enabled, the Update Project Plan Data process runs as part of the Update Project Performance Data process. Otherwise, navigate to the Manage Financial Project Plan page, click <b>Update Amounts &gt; Update Actual Amounts</b> from the <b>Actions</b> menu, and submit the Update Project Plan Data process.
Include Closed Projects	By default, the Update Project Performance Data process doesn't run on closed projects. Choose <b>Yes</b> in the <b>Include Closed Projects</b> field to process closed projects during summarization.

## Settings That Affect Performance Data Summarization

**Tip:** We recommended that you run the Update Project Performance Data process with the default parameter values.

**Note:** Data security checks are turned off when you run the Update Project Performance Data process with either the Project Manager parameter or with the From Project Number and To Project Number parameters. All projects for a project manager (if provided) or the projects between the From Project Number and To Project Number are summarized and the latest summarized data for these projects is displayed in the Project Management infolets, in the Project Performance Dashboard regions, and in the My Projects page.

Before you run the Update Project Performance Data process from the Scheduled Processes page, select one of the following summarization methods:

Summarization Method	Usage
Incremental	Summarizes new transactions that are yet to be summarized. Also, processes all the planning resource breakdown structure and reporting resource breakdown structure changes that are associated to summarized projects.
Delete and resummarize	Corrects summary data when the source system data changes outside the regular transaction flow.  This option is disabled by default. But, if you want to delete and resummarize performance data, ask your application administrator to set the <b>Enable Maintain Project Performance Data job</b> profile option to Yes. The profile option is in the Setup and Maintenance work area.
Resource breakdown structure	Migrates 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.  If you update a project-specific resource breakdown structure that allows resource changes at project level, then run the Update Project Performance Data process in the Resource breakdown structure mode for the changes to reflect in reporting. If you want the changes to apply to new projects that use this resource breakdown structure, then use the <b>Manage Planning and Billing Resource Breakdown Structures</b> task in the Setup and Maintenance work area to make the changes at the setup level.  If you update a resource breakdown structure that doesn't allow resource changes at project level and you want these changes to reflect in the projects that are currently associated with this resource breakdown structure, then click <b>Update Mapping</b> or run the Update Project Performance Data process in the Resource breakdown structure or Incremental mode.

Each time you run the summarization process manually, specify the summarization parameters and whether to summarize the following transactions:

Transaction	Data Summarized
Budget and Forecast	Approved current and previous forecasts, and current and original budgets that have a baseline version. This includes approved budgets and primary forecasts.
Commitment	Commitments such as supplier invoices, purchase orders, and requisitions from other Oracle Fusion Cloud Applications.
Actual Costs	The actual costs incurred for your projects.

## How to Run the Update Project Performance Data Process

Project application administrators can schedule the Update Project Performance Data process to run periodically by clicking **Schedule New Process** on the Scheduled Processes page.

Project managers can submit these processes from the Project Performance Dashboard or the Project Management work area. Project administrators can submit these processes from the Project Performance Dashboard or the Project Financial Management work area.

After you run the Update Project Performance Data process, you can track its progress on the Scheduled Processes page.

## Troubleshooting

In a non-production instance, after a production-to-test refresh, you might notice these issues:

- The latest values aren't displayed in the Financial Performance section (go to the Project Overview page and click the Financials tab), the Project Performance Dashboard, or the Review Project Performance page even after the Essbase process was successful.
- The Update Project Performance Data or Update Project Contract Performance Data process ends in a warning if its sub process Maintain Project Performance Data: Maintain Oracle Essbase Cube ends in an error.

To fix these issues, regenerate the Projects Essbase cube by running the Maintain Project Performance Data Without Producing Report process with the Recreate Cube with Existing Summary Data parameter set to Yes and the rest of the parameters set to their default values. This is a mandatory step that must be completed after every P2T refresh.

If a production-to-test refresh hasn't occurred and you are facing similar issues, then run the Update Project Performance Data Without Producing Report process with all the parameters set to their default values. This spawns a new Update Project Performance Data Without Producing Report job that automatically fixes the issue. Run the Update Project Performance Data Without Producing Report process once again with all parameters set to their default values to ensure the successful completion of the Maintain Project Performance Data: Maintain Oracle Essbase Cube process.

### *Related Topics*

- [How Resource Mapping is Calculated](#)
- [Reporting Resource Breakdown Structure Versions](#)

## KPI Components

A key performance indicator (KPI) lets you 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 value is compared with the thresholds defined for the KPI. If the value falls within any of the defined threshold levels, then the status indicator of that threshold is associated with the performance measure.

The key components of a KPI are:

- Performance Measure
- Performance Status Indicator
- Threshold Level

- Performance Trend Indicator
- Tolerance Percentage

## Performance Measure

Performance measures are predefined criteria for performance or schedule that are used to determine if a project is on track. You can create your own performance measures based on existing custom performance measures to effectively determine the overall health of your projects. Use any of the available performance measure to create a KPI.

Performance measures are defined for budgets and forecasts, billing and revenue, costs, effort, margin, capitalization, and so on. Following are examples of predefined performance measures:

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

You can rename these performance measures to make the measure names more relevant for your business needs. For example, rename EAC Budget Cost to Budget at Completion.

A performance measure is associated with one of the following time dimensions:

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

A 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 a 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 indicate the status of a project, such as critical, at risk, and on track. Each icon indicates 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 in the 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 threshold levels you defined, the closest threshold is used to determine the KPI status. For example, if a KPI value falls lower than the lowest threshold level, the status of the lowest threshold level is assigned 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.

## Performance Trend Indicator

Performance trend indicators show the improving or worsening KPI value trends on the project. Each icon indicates 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 shows a negative impact.

## Tolerance Percentage

A tolerance percentage is used to compare the previous KPI value with 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 the 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.

### *Related Topics*

- [How Performance Status For Tasks And Resources Is Calculated](#)

## How KPI Values Are Generated

Schedule or submit the Update Project Performance Data process to generate KPI values and analyze project performance. However, if you want to generate KPI values for a particular period, then submit the Generate KPI Values process with an appropriate KPI period determination date.

You can assign a threshold level for the KPI values. The KPI values are generated and then a status indicator is assigned to the KPI based on the threshold you define.

## Settings That Affect KPI Values

Before you submit the **Generate KPI Values** process from the Scheduled Processes page, you can set the following parameters:



Parameters	Description
KPI Period Determination Date	Date used to derive the project accounting calendar and accounting calendar periods for performance measure calculations when KPI values are generated.
Replace Current KPI Values	Replaces the existing KPI values with the values that you're generating now.
Delete Previous KPI Values	Deletes the KPI values that were generated by prior runs of the <b>Generate KPI Values</b> process.
Number of Days to Retain KPI Values	Retains the KPI values for the specified number of days starting from the current date. The KPI values generated prior to the specified number of days are deleted.  This parameter is applicable only when the Delete Previous KPI Values parameter is set to Yes.

Suppose that you set the KPI Period Determination Date parameter value and generate the KPI values as mentioned in the following table:

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

If you select the **Replace Current KPI Values** parameter and generate KPI values on November 18, 2010, then the KPI values generated on November 12, 2010 are replaced with the 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 during the period.

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

**Note:** Don't delete previous KPI values if 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.

## How KPI Values are Generated

KPI values are calculated based on the value of the performance measure associated with the project. The **Update Project Performance Data** process generates KPI values using the current date as the KPI period determination date. If you submit the **Generate KPI Values** process to generate KPI values, the KPI period determination date is used to determine the period. KPI values are generated for the period based on the options in the KPI definition.

Only one set of KPIs are maintained for a KPI period determination date. If KPIs are generated for the same date more than once, then the existing KPI values are overwritten by the latest KPI values.

Suppose that the KPI values are generated with the KPI period determination date of August 24 at 8:15 a.m. for projects A and B. For project B, KPI values are also generated with a KPI period determination date of August 24 at 10:45 a.m.. The KPI values for project B that are generated at 8:15 a.m. are deleted, but the KPI values of project A are retained.

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

## Generate KPI Notifications

To automatically notify project managers after you generate KPI values:

1. Go to **Projects > Project Financial Management**.
2. In the My Projects page, right-click the project and select **Manage Financial Project Settings**.
3. In the Manage Financial Project Settings page, click **Reporting**.
4. Select the **Notify project manager** check box in the KPI Notifications section.

*Related Topics*

## How KPI Trends 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 default 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

This table displays the trend when KPI values are generated the first time 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	NA	NA
PTD Actual Spent Equipment Effort Percentage	5 Up is Unfavorable	30 On Track	NA	NA
PTD Actual Invoice Amount	5 Up is Favorable	\$5000 Warning	NA	NA
Actual Billable Cost Percentage	2 Up is Favorable	90 On Track	NA	NA
PTD Actual Margin Percentage	2 Up is Favorable	30 On Track	NA	NA

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

This table displays the trend when KPI values are 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

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 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 isn't 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

This table displays the trend when KPI values are generated the 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

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 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.

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](#)
- [Tolerance Percentage](#)

## Examples of KPI Value Calculations

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.

This table displays how the current period, prior period, and prior quarter KPI values are calculated for the date October 3, 2009 on the accounting and project accounting calendars.

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
3-Oct-09	October 3	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.

This table displays how the current period, prior period, and prior quarter KPI values are calculated for the date October 4, 2009 on the accounting and project accounting calendars.

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
3-Oct-09	October 3	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
25-Sep-09	October 4	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.

This table displays how the current period, prior period, and prior quarter KPI values are calculated for the period October 10, 2009 on the accounting and project accounting calendars.

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
3-Oct-09	October 3	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
25-Sep-09	October 4	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
10-Oct-09	October 10	Oct-09	PTD Revenue Variance Percentage	Yes	Oct-09	Sep-09	Q3

## Import Project Key Performance Indicators

Import KPIs for project templates and projects that are enabled for financial management into Oracle Fusion Cloud Project Management by using the Import Project Key Performance Indicators file-based data import feature.

You can also use the Excel template to update KPI assignments to project templates and projects that are enabled for financial management. For example, if you no longer want to see the values of certain KPIs for a project, then you can disable those KPIs for that project.

The Excel template is part of the External Data Integration Services for Oracle Cloud feature. To download the Project Key Performance Indicators Interface Excel workbook template, see the File-Based Data Import (FBDI) for Project Management guide.



To attach or disable KPIs for project templates or projects:

1. Prepare your data in the Project Key Performance Indicators Interface macro-enabled Excel workbook template.
2. Click **Generate CSV File** in the template to create a comma-separated values file.
3. Navigate to the Scheduled Processes page.
4. Click **Schedule New Process**, select **Load Interface File for Import** from the **Name** drop-down list, select **Import Project Key Performance Indicators** from the **Import Process** drop-down list, upload the data file, and click **Submit**.

## Output Report

After the **Import Project Key Performance Indicators** process is complete, the **Import Project Key Performance Indicators: Generate Report** process runs automatically and creates the Import Project Key Performance Indicators Report. This output report details:

- The number of KPIs and projects that were processed, attached successfully, and not attached. Also, lists the KPIs and projects that weren't attached.
- The errors due to which the records weren't processed. Correct these errors in the same output report and re-upload it.

Review the output report and repeat the following steps until all rows are imported successfully and the KPIs are attached to the project templates or projects:

1. Correct the errors in the Import Project Key Performance Indicators Report output report.
2. Generate CSV files.
3. Submit the **Load Interface File for Import** process.

## FAQs for Update Project Performance Data and Generate KPIs

### Who can run the summarization processes and what data can they view?

This table details the processes you can run if you're assigned any of these job roles. It also lists the pages where you can view the summarized data once the processes are complete.

Job Role	Processes You Can Run	Where You Can View Summarized Data
Project Manager	Update Project Performance Data Update Project Contract Performance Data Maintain Project Performance Data Generate KPI Values	Project Overview page ((Financials tab, Financial Performance region) Project Performance Dashboard Project Management Dashboard Project Manager Dashboard Review Project Performance page

Job Role	Processes You Can Run	Where You Can View Summarized Data
		Analyze KPI Categories page  Project Performance, Project Insights, Task Performance and Resource Performance REST API  SmartView (An Excel plugin that is used to develop custom reports based on Projects Essbase Cube data)
Project Administrator	Update Project Performance Data Update Project Contract Performance Data Generate KPI Values	Project Performance, Task Performance and Resource Performance REST API
Project Application Administrator	Generate Project Updates E-Mail Create Copy of Agile Project Progress Data Update EPS Data Maintain Project Performance Data	Enterprise Project Structure (Project Hierarchy Dashboard)
Custom Project Administrator	Update Project Performance Data  Maintain Project Performance Data (when Run Maintain Project Performance privilege is assigned)	Project Performance Dashboard, Project Management Dashboard (when Manage Project Performance privilege is assigned)  Review Project Performance page (when Review Project Performance privilege is assigned)  Project Overview page (when View Project Financial Performance in Project Home privilege is assigned)  Analyze KPI Categories page (when Review Project Performance Health privilege is assigned)
Project Accountant	Update Project Contract Performance Data Update Project Performance Data Generate KPI Values	Review Project Performance page  Project Performance Dashboard  Project Performance, Task Performance and Resource Performance REST API  SmartView
Project Executive	Update EPS Data	Enterprise Project Structure (Project Hierarchy Dashboard)
Grants Administrator	Update Award Performance Data Update Project Performance Data Update Project Contract Performance Data Generate KPI Values	Project Performance, Task Performance and Resource Performance REST API

Job Role	Processes You Can Run	Where You Can View Summarized Data
Principal Investigator	Update Award Performance Data	Doesn't have the privileges to view summarized data.
Project Integration Specialist	Doesn't have the privileges to run any process.	Project Performance, Task Performance and Resource Performance REST API

## How can I view projects on the Project Performance Dashboard?

If you're a project manager, you can view your projects on the Project Performance Dashboard.

If you aren't a project manager, you can access the Project Performance Dashboard and view projects using a custom role that includes the functional security privilege Manage Project Performance (PJS\_MANAGE\_PROJECT\_PERFORMANCE\_PRIV). For example, if you're an administrator at the project, organization, or business unit level, you can access the Project Performance Dashboard to view the projects that you administer, or those that belong to the organizations or business units that you administer, or the ones to which you have access. You can also navigate to the Project Overview page in context of the Project Financial Management work area.

Additionally, if the following data security privileges are granted to custom roles, you can navigate to the Review Project Performance and Analyze KPI Categories pages from the Project Performance Dashboard:

- **PJS\_REVIEW\_PROJECT\_PERFORMANCE\_DATA** to access the Review Project Performance page
- **PJS\_REVIEW\_PROJECT\_PERFORMANCE\_HEALTH\_DATA** to access the Analyze KPI Categories page

## 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 actions trigger performance data summarization?

The following actions can trigger performance data summarization.

- Running the Update Project Performance Data process from the Project Performance Dashboard or the Project Financial Management work area.
- Running or scheduling the Update Project Performance Data process from the process scheduler.
- Creating revenue and invoice transactions.

- Creating actual cost transactions.
- Setting a baseline for an approved cost budget.

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

Project managers and project administrators can submit the Update Project Performance Data process from the Project Performance Dashboard, My Projects page, or the Scheduled Processes page. Project application administrators can submit the Update Project Performance Data process from the Scheduled Processes page.

To update performance data for all projects in a project owning organization or business unit, project administrators must submit the **Update Project Performance Data** process from the Scheduled Processes page.

Project managers must ensure that they run the **Update Project Performance Data** process so that all the infolets on the Project Management dashboard are up-to-date.

You don't need to submit the **Generate KPI Values** process separately as KPIs are generated as part of the **Update Project Performance Data** process. However, if you want to generate KPI values for a particular period, then submit the **Generate KPI Values** process with an appropriate KPI period determination date.

### *Related Topics*

- [Project Performance Data Summarization](#)

# 3 Project Performance Analysis

## Considerations for Analyzing Project Performance Using the Project Management Dashboard

Project managers can use the Project Management dashboard to review the overall health, progress, and financial status of projects, and resolve issues. The dashboard consists of a group of infolets that displays critical information about your projects.

Project managers can use the information on the Project Management dashboard for planning work and managing financial projects. Project managers and project application administrators must run the **Update Project Performance Data** process from the Scheduled Processes page to refresh the data on the Project Management dashboard.

If you don't see updated information on certain or all infolets, it could be because:

- You haven't implemented either Project Execution Management or Project Financial Management.
- You don't have transactions yet.
- You haven't run the **Update Project Performance Data** process if you're using Project Financial Management.

## Project Management Dashboard Infolets

Depending on whether you implemented Project Financial Management or Project Execution Management offering, the corresponding infolets display data on the Project Management dashboard. You can also implement both offerings simultaneously. You can hide the infolets that display no data. Use the Infolet Repository to enable or disable infolets on the Project Management dashboard.

The Project Management dashboard comprises of the following infolets that project managers can use to review project performance:

Infolet	Data Source	Data Displayed	Actions to Perform
My Projects	All the projects that you manage	Total count of the projects that you manage.	<ul style="list-style-type: none"> <li>• Navigate to the My Projects page to analyze each project.</li> <li>• Analyze the overall progress of projects and take appropriate action.</li> </ul>
Health	Project health based on KPI thresholds	<p>Project health in the order of severity. The project that's most severe appears first.</p> <p>Run the <b>Update Project Performance Data</b> process so that this infolet displays up-to-date information.</p>	<ul style="list-style-type: none"> <li>• View the health of your projects that are enabled for financial management in the order of health status. For example, critical projects are listed topmost, at risk projects follow next, and on track projects follow thereafter.</li> <li>• Post messages on the project wall from the infolet to draw attention to the project health status.</li> </ul>

Infolet	Data Source	Data Displayed	Actions to Perform
			<ul style="list-style-type: none"> <li>Manage project costs and budgets and analyze KPIs that contribute to the current project health status.</li> </ul>
Time Cards	Missing or partially reported time cards	Missing or partial time cards for the previous five weeks, including the current reporting period week.	<p>You can post messages:</p> <ul style="list-style-type: none"> <li>On the project wall for time cards that aren't accurately submitted.</li> <li>To the project team members who haven't submitted accurate time cards.</li> </ul>
Invoices	Invoices pending approval	Invoices; review to determine which invoices are pending approval.	Approve or reject the invoices if they're assigned to you for approval.
Uninvoiced Cost	Billable cost transactions that are uninvoiced or partially invoiced	Projects that have the highest number of uninvoiced costs.	Drill down to view the project cost transactions that contribute to the uninvoiced amount.
Cost Budget	Comparison of project cost to project budget	The cost budget for the project; displays only the current baseline approved cost budget.	<p>Create a budget or navigate to the Manage Project Budgets and Manage Project Costs pages to review budget and cost information.</p> <p>You can perform the following actions:</p> <ul style="list-style-type: none"> <li>Determine the variance between the spent and the budget to date amounts for over budget projects as displayed in the donuts.</li> <li>Ensure that the spent amount includes both project costs and commitments from the start of the project to the current reporting period.</li> <li>Drill down to the Manage Project Costs page. The default view displays project costs incurred within the last 30 days. Change the filter to view data further in the past.</li> </ul>
Team Allocation	Number of over or under allocated resources	Over and under allocated team members on projects. You can review resource allocations over weekly periods.	<p>Take appropriate action when:</p> <ul style="list-style-type: none"> <li>Resources are over or under allocated to the project.</li> <li>Under allocated resources in one project can be used in another project.</li> </ul>

Infolet	Data Source	Data Displayed	Actions to Perform
			<ul style="list-style-type: none"> <li>Under allocated resources cause delays in projects.</li> </ul>
Assignments	Assignments ending within two weeks and reserved assignments	Resource assignments for which the assignment end date is within two weeks.	<p>Navigate to the Manage Project Resources page to review resource details and take appropriate action by:</p> <ul style="list-style-type: none"> <li>Viewing the assignment details.</li> <li>Adjusting the resource assignment.</li> <li>Confirming or canceling the assignment.</li> </ul>
Milestones	Milestones past due, at risk, or due soon	Milestones past due, at risk, or due soon.	<p>Navigate to the expanded view for additional details of project milestones in a timeline view. From this detailed view, take appropriate action when project milestones are Past Due, Due Soon, or At Risk.</p>
Change Order	Change orders summarized by additional labor hours and cost impact	Change orders.	<p>From the expanded view, quickly navigate to the details for a change order and take appropriate action by:</p> <ul style="list-style-type: none"> <li>Creating or accessing the impact of the change order.</li> <li>Approving or rejecting the change order.</li> </ul>
Progress	Project progress with respect to planned dates	The target and actual percentage of work completed on projects.	<p>If exceptions exist, navigate to the Manage Task Exceptions page to resolve the exceptions. Take appropriate action by:</p> <ul style="list-style-type: none"> <li>Analyzing the list of projects that aren't performing well and require immediate action.</li> <li>Performing the next steps to improve the progress of projects.</li> </ul>

#### Related Topics

- Project Performance Data Summarization
- How can I update project performance data and generate KPI values?

## Draw Insight on Project Health and Progress

Use the project management infolets to review your project statuses, identify areas that require attention, and take necessary actions to keep your projects on track.

Let's say you want to perform the following tasks using the Health and Progress infolets:

Task	Infolet
Analyze transactions for a critical project	Health
Review task exceptions	Progress

### Analyze Transactions for a Critical Project

Use the Health infolet to review the project health based on the status of the KPIs. In this example, let's review a project that's in Critical status.

1. Navigate to the Project Management Dashboard area on the Home page.
2. Click the **Expand** icon on the Health infolet.
3. Click the **Actions** menu for a project that's in Critical status.
4. Click **View KPI Watchlist** to examine the KPI Watchlist for the critical project.

**Note:** Instead of using the **Actions** menu, you can click the name the project to open the KPI Watchlist.

5. On the KPI Watchlist dialog box, place your mouse over various points on the charts and graphs to view the values and generation dates.
6. Click the **Actions** menu for the ITD Actual Nonbillable Cost (%) KPI.
7. Click **View Costs** to study the cost transactions that are making this KPI critical.
8. On the Manage Project Costs page, locate an unbilled transaction.
9. Enable the check box for the transaction.
10. Click **Set to Billable** to make the transaction billable.
11. Click **Done**.

### Review Task Exceptions

Use the Progress infolet to compare the target and actual percentage of work completed on your projects, and to identify task exceptions. In this example, let's analyze a task with exceptions.

1. On the Progress infolet, locate a project that's behind schedule and has at least one exception.

**Tip:** Projects that are behind schedule appear at the beginning of the infolet.

2. Click the **Exceptions** number for the project.
3. On the Manage Task Exceptions page, click **Preview Total Impact**.
4. On the Preview Total Impact page, review the impact of the exceptions on the project schedule and compare the current and proposed task values.
5. Click **Accept All** to update the project plan with the proposed values.



**Note:** If you don't want to accept the changes, then you can decline the changes or discuss them with the project team.

6. Click **Done**.

## How Project Progress is Calculated

Project managers use the Progress infolet from the Project Management Dashboard to compare the target and actual percentage of work completed on the projects they own.



Projects with maximum variance between actual and target percent complete appear topmost. Projects with same variance between actual and target percent complete are sorted in the reverse order of number of exceptions. If no effort is planned for a project, then the infolet displays zero percent complete. As soon as the team members start entering progress for tasks, the actual percent is calculated. From the Progress infolet, you can drill down to the Manage Project Plan and Manage Task Exceptions pages to view the details.

## Settings That Affect Project Progress

Values in the Progress infolet are derived from the Manage Project Plan page. The project progress depends on the following values of a project:

- Current date
- Planned start date
- Planned finish date
- Planned effort in hours
- Current effort in hours
- Actual hours

## Formulas to Calculate Project Progress

Here are the formulas to calculate the target and actual percent complete of a project:

- target percent complete =  $(\text{expected hours} / \text{planned effort in hours}) * 100$ 
  - expected hours =  $(\text{expected duration} * \text{planned effort in hours}) / \text{planned duration}$
  - expected duration =  $\text{current date} - \text{planned start date} + 1$
  - planned duration =  $\text{planned finish date} - \text{planned start date} + 1$
- actual percent complete =  $(\text{actual hours} / \text{current effort in hours}) * 100$

**Note:** The actual percent complete is the rolled up percent complete of the project.

This table shows the values used to calculate target and actual percent complete for Project 1. Assume the current date is 2-Jun-2017, the calendar is 5 days a week with no holidays, and a workday contains 8 hours.

Name	Planned Effort in Days	Planned Start Date	Planned Finish Date	Planned Effort in Hours	Actual Hours	Remaining Hours	Current Effort in Hours	Expected Hours
Project 1	57	22-May-2017	30-Jun-2017	456	120	336	456	160
Task 1	10	22-May-2017	02-Jun-2017	80	40	40	80	$(10 * 80) / 10 = 80$
Task 2	7	01-Jun-2017	09-Jun-2017	56	16	40	56	$(2 * 56) / 7 = 16$
Task 3	20	05-Jun-2017	30-Jun-2017	160	0	160	160	0
Task 4	20	24-May-2017	20-Jun-2017	160	64	96	160	$(8 * 160) / 20 = 64$

This table shows the values used to calculate target and actual percent complete for Project 2. Assume the current date is 2-Jun-2017, the calendar is 5 days a week with no holidays, and a workday contains 8 hours.

Name	Planned Effort in Days	Planned Start Date	Planned Finish Date	Planned Effort in Hours	Actual Hours	Remaining Hours	Current Effort in Hours	Expected Hours
Project 2	16	29-May-2017	14-Jun-2017	128	48	72	128	48
Task 1	5	29-May-2017	02-Jun-2017	40	40	0	40	$(5 * 40) / 5 = 40$
Task 2	3	02-Jun-2017	06-Jun-2017	24	8	16	24	$(1 * 24) / 3 = 8$
Task 3	8	05-Jun-2017	14-Jun-2017	64	0	64	64	0

The project progress is determined as follows:

- If target percent complete is greater than actual percent complete then your project is behind schedule.
- If target percent complete is less than actual percent complete then your project is ahead of schedule.
- If target percent complete is equal to actual percent complete then your project is on schedule.

This table shows the calculation of target percent complete and actual percent complete for Project 1 and Project 2 and their progress results. For Project 1, the planned and current effort are same. For Project 2, the current effort is less than the planned effort.

Project	Expected Hours	Actual Hours	Target Percent Complete	Actual Percent Complete	Progress
Project 1	160	120	$(160 / 456) * 100 = 35$	$(120 / 456) * 100 = 26$	9 percent behind schedule
Project 2	48	48	$(48 / 128) * 100 = 37.5$	$(48 / 128) * 100 = 37.5$	On schedule

## How Performance Status For Tasks And Resources Is Calculated

Performance status is individually calculated for all levels of the task and resource hierarchy.

The performance status for individual tasks and resources is calculated only for percentage-based KPI values. These calculations are based on the threshold values that you set while creating percentage-based KPIs.

### Settings That Affect Performance Status for Tasks and Resources

In the Manage Financial Project Settings page, if you enable the **Track KPI by Task** and **Track KPI by Resource** settings for a KPI, then a status indicator appears for the task and resource on project performance reports when the individual KPI value isn't on track. This helps identify troubled tasks and resources in a hierarchical task and resource structure in a project.

### Examples of Performance Status for Tasks and Resources Calculations

Let's assume that for the KPI named **ITD Nonbillable Cost as a Percentage of Total Cost**, the threshold values are defined as listed in the following table. The status of the tasks and resources is calculated as listed in the Status Indicator column.

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

Suppose that the System Implementation main task contains six sub tasks: Planning, Definition, Build, Test, Release, and Support. The table shows the corresponding costs for each sub task and the ITD Nonbillable Cost as a percentage of the total cost. The sum of the cost of each sub task rolls up to the main task.

Task Hierarchy	Task	ITD Nonbillable Cost	ITD Billable Cost	ITD Total Cost	ITD Nonbillable Cost as a Percentage of Total Cost
1	System Implementation	21,000	105,000	126,000	16.66%
1.1	Planning	0	21,000	21,000	0%
1.2	Definition	6,000	51,000	57,000	10.53%
1.3	Build	15,000	33,000	48,000	31.25%
1.4	Test	0	0	0	0%
1.5	Release	0	0	0	0%
1.6	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.

Lets take another example where the Consulting resource breakdown structure contains a Labor resource. Labor is a parent to the Project Manager resource, which is a parent to the Maxwell Martin, Robert Altima, and Fred Jones resources.

The **ITD Nonbillable Cost as a Percentage of Total Cost** KPI value for Labor is 12.97% and for Fred Jones is 0%. So, Labor has a status indicator of **Critical** and Fred Jones doesn't have a status indicator. This is because the KPI value for each row in the hierarchical structure is calculated separately.

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

Resource Hierarchy	Resource	ITD Nonbillable Cost	ITD Billable Cost	ITD Total Cost	ITD Nonbillable Cost as a Percentage of Total Cost
1.1.1.3	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's not on track is designated as an exception. The KPI value for the project doesn't 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's 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 that's used to generate the latest KPI values.

## FAQs for Project Performance Analysis

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

The overall health indicator is visible only after the overall health is calculated. The overall health is calculated for a project if 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 the status of most of the KPIs is on track?

The 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 configure 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 can't coexist. Time cards that haven't been entered are considered missing. A time card is an unprocessed transaction after it's entered into the application and before it's included in the Update Project Performance Data process.

## How can I evaluate project performance if KPIs aren't tracked?

Use the Review Project Performance page to perform detailed financial performance analysis for a project than what's possible on the Project Performance Dashboard. You can review amounts at the task or resource level, and drill down to individual expenditure items.

## Why can't I view the KPI category analysis?

You can't view the KPI category analysis due to the following reasons.

- The project unit doesn't track KPIs.
- No KPIs are associated with the project.
- KPI values aren't generated.

## FAQs for Project Comparison Graphs

### Which currency is used on a project comparison graph?

The ledger currency is used if all projects in the project list are using the same ledger currency.

However, if the projects in the project list are using different ledger currencies, then 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?

When 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 are received from the transaction source but failed the posting process.

Pending time transactions are received from the transaction source but haven't completed the posting process.

Time transactions are missing if the project cost for a team member doesn't exist for the transaction source, document, and the 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 KPI Watchlist

### 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 KPI values when no previous approved forecast exists, a zero value is used to generate KPI values. So, 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.

### What happens if I use PTD amount-based measures for large projects?

PTD amount-based measures use the same threshold values for all phases of the project. This may result in a spike in the KPI values if the amounts that are 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.

## 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](#)

## Why are the KPIs visible on the Analyze KPI Categories page even 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 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 KPI 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 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.

## Why does the trend indicator differ from the KPI values on the Analyze KPI page?

The variance is likely due to a small difference between the KPI values that's ignored while calculating the trend on the Analyze KPI page for KPIs that are based on non-currency measures.

The KPI values on the Analyze KPI page are based on the currency definition for currency-based measures and user preferences for non-currency-based measures. However, the trend indicator is determined by taking into account only two places of decimal values for non-currency-based measures.

## FAQs for Project Financial Performance

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

When the cost and revenue budgets are contained in different budget versions, the effort represented in project performance reporting is only for the cost budget.

Similarly, when the cost and revenue forecasts are contained in different forecast versions, the effort 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 doesn't include any intercompany revenue associated with the project.

## FAQs for Task and Resource Level Analysis

### 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 lets you 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.

# 4 Project Programs

## Program Overview

The Program Management application enables you to track programs and review program performance. It helps you roll-up projects under a program, analyze performance of these projects, and report overall program health to your stakeholders.

You can also use Program Management to analyze program performance and create action plans around programs and projects that need attention.

Use Program Management to:

- Group related projects, view project progress, and analyze related financial data.
- Work with stakeholders to manage risks.
- Centralize analysis while still managing specific deliverables at the project level.
- Improve communication and coordination between program managers and stakeholders.

More specifically, use Program Management to:

- Define your program using a guided process to describe its purpose, invite contributors and stakeholders, and add projects.
- Organize your programs into a hierarchical structure, where you can add child programs and grandchild programs.
- Report on projects in a program using a currency and calendar of your choice. For example, you can create a report that lists values in pounds instead of dollars, and follows a financial calendar rather than the project calendar.
- Use the Program Headlines and Analysis tabs to monitor program performance and identify risks. The Headlines tab provides insights into program performance for four of your top measures. The Analysis page displays details associated with your program's performance, including actual cost and effort numbers, nonbillable totals, budget and forecast, commitments, capitalization, earned value, margin, and revenue performance.
- Track programs and projects of interest in your watchlist.
- Keep track of decisions, comments, and issues through the program life cycle by adding notes to programs and projects.
- Keep stakeholders informed by regularly publishing program communications. Program Managers can share the program's health status with stakeholders, and stakeholders can view and collaborate on the shared reports.
- Create analysis using the Projects - Program Performance Reporting subject area in the Oracle Transactional Business Intelligence (OTBI) work area.

## How Not to Use Program Management

Program Management helps program managers effectively track and report on program progress. However, it may not function as efficiently as an operational or organization-level reporting tool.

When you bring large numbers of org-wide or unrelated projects under a single program, it may become difficult to create meaningful reports and generate actionable insights into program progress. The main reason for these

difficulties is that Program Management is specifically designed to analyze and report on programs that have inter-related projects. Adding multiple unrelated projects under a single program may lead to insights and reports that do not offer any significant benefit.

## Key Terms Used in Program Management

Here are a few terms that are extensively used in the Program Management application and user assistance.

### Program

A program is a collection of related projects and programs.

### Program Manager

Program managers coordinate and oversee multiple programs and projects, track program and project progress, and communicate program health to program stakeholders. Program managers use the Programs user interface to create, edit, delete, and analyze programs and create action plans to address potential risks and issues. They have access to programs that they own, and to programs on which they are contributors.

### Program Stakeholder

A program stakeholder is a person that is interested in a program and has the ability to impact its success. Program stakeholders use the Program Stakeholders user interface to view published reports where they are invited members. They can share insights, provide guidance, and collaborate with their program manager and fellow stakeholders using comments entered for each report version.

### Project

A project is a time-bound initiative that achieves a specific goal. This goal could be anything: a new building, a software application, or even a methodology of performing specific tasks. Projects typically require planning, people, equipment, materials, and budgets, each of which must be managed efficiently if the project is to succeed.

### Program Members

Program members are stakeholders and other program managers who contribute to a program. Program members may offer guidance on program management and tracking, and view program progress reports when the program manager publishes them.

Program stakeholders are executives in the company who are interested in the initiative. Their key concerns are typically around the timeline, scope, effort, and budget associated with the program.

In the Program Management application, stakeholders can view program reports when program managers publish them. They can also add comments to programs after they review program reports.

### Program Calendar

Use a program calendar to define periods for program analysis. This is typically the same calendar as your financial project accounting calendar. The Project Application Administrator uses the Project Calendar Mapping Method to determine how the project's accounting calendar period maps to the program calendar, if the two are different.

## Program Headlines

The Headlines tab enables program managers to:

- Select and monitor key performance measures that enable them to quickly assess the overall health of programs.
- Create and review action plans.

## Watchlist

During analysis, add programs and projects of interest to your watchlist.

## Program Currency

The program currency is the currency into which project monetary amounts are converted for the purpose of program analysis. Program managers set their currency preferences by selecting from the currencies enabled for programs in the Program Headlines and Analysis tabs. Program Managers also specify the program currency for stakeholder communication reports. Administrators enable currencies for programs and ensure that currency conversion rates exist between the project and program currencies.

## Program Analysis

The Program Analysis tab enables program managers to view the detailed performance of a program or project, including actual cost and effort, nonbillable totals, budget and forecast, commitments, capitalization, earned value, margin, and revenue performance. Program managers can flexibly choose the performance measures they'd like to see while reviewing program progress and financial performance. They can also view and manage their watchlist, notes, and action plans.

## Program Performance Measures

Program performance measures indicate the health of a program. Approximately 145 measures are enabled for programs, and 15 are set to display by default. Program managers can specify the measures that they want to see in the Headlines tab. They can also identify the performance measures associated with program progress and financial performance, in the Analysis page.

To reduce the list of measures that program managers have to review, administrators can disable unwanted measures using the **Manage Performance Measures** task in the Project Financial Management offering. They can also modify measure names and their default display settings using the same task.

## Action Plans

Use action plans to track various situations that arise when managing programs. For example, create action plans to mitigate risk that arises from unexpected events, or to quickly correct errors in business processing. Also, use them to help with program administration activities, such as rolling out programs, working with staffing managers, and completing retrospectives.

Project managers and team members can view action plans associated with their projects on the Project Management Issues and My Work Issues pages.

Notifications inform owners about new action plan assignments and progress updates. Project managers and team members can set notification preferences for the notifications they want to receive.

Action plans and their close reasons and resolution commentary contribute to the overall program retrospective, providing insights for both current and future programs.

Action plans contain one or more action items.

## Action Items

Action items are the specific tasks included in an action plan. An action item is assigned an owner who's responsible for completing it.

## Program Communications

The Program Communications page enables program managers to configure, create, and publish reports. Stakeholders view published reports using the Program Stakeholders work area.

## Program Communications Reports and Template

Program managers create program templates to design the content and layout of program reports. Templates contain metrics, text blocks, and other elements, which the program manager can organize and save as reusable content groups, or use as-is in the template.

# How is the Program Headlines page organized?

The Program Headlines page offers a graphical display of measures and trends, offering program managers insight into the progress and performance of their projects and programs.

## Program Selection

By default, the Headlines page displays details associated with the alphabetically first program. Click the program name to view all your programs. Select a program to view its progress and performance details.

## Edit Preferences

Use the **Edit Preferences** button on the Headlines page to perform the following tasks:

- Select the **Currency** in which you want to view performance measures for a program. By default, this field displays the currency that's configured for the program. When you change the value in this field, the application displays performance measures in that currency until you change it again.

For more information on how program analysis currencies are configured, see [Manage Program Options](#).

- Select the **Period** for which you want to view program performance measures. Choose from the following periods:
  - **Current:** The current program calendar period, based on the date.
  - **Last:** The previous program calendar period, based on the date.
  - **Select period:** A unique selection that you can make by

- Change the primary performance measure for each scorecard, or select **None** to hide the scorecard and related visualizations. For example, select the **ITD actual margin** performance measure in the **Margin** field to view related numbers and visualizations in the Margin scorecard.

## Program Performance Details

The Program Headlines page offers the following scorecards, each offering numbers and visualizations associated with the performance measure you choose for it using the **Edit Preferences** button:

- Margin
- Revenue
- Cost
- Earned Value
- Effort
- Action Plan

Review each scorecard to view key details associated with the performance measure you selected for it. Click a scorecard to review associated performance numbers and related visualizations.

## The Action Plans Tab

The Action Plans tab displays all the action plans and action items created for a program. It also enables you to search for a specific action plan or action item. You can also use the **Ellipsis** icon associated with each action plan or action item to view and perform related tasks.

The Action Plans tab also lists out a graphical visualization that organizes action plans by status, and another that organizes action plans by age.

# Considerations for Managing Programs

Here are a few considerations to manage your programs.

## Program Structures

- You can create a program hierarchical structure up to three levels. A root parent program can have two child programs.
- You can move the program to another hierarchy or make it a root parent program.
- A project can be assigned to a program hierarchy only once. But, you can add as many projects under a program.
- Use the drag and drop feature on the user interface to move projects and programs.

## Program Security

The access to programs is determined by the members' access value.

- Program managers can create, edit, delete, and analyze programs they own, and programs in which they're added as contributors. They can also view Oracle Transactional Business Intelligence (OTBI) analyses for the same set of programs.
- Project executives can only view OTBI analyses for programs in which they're added as members.
- The child program inherits the public access setting plus the members and access types from the parent program.

## Program Performance

- The Update Project Performance Data process updates projects that match the criteria you entered. If the project is assigned to a program, summarized program totals are recalculated based on the project's latest performance. Parent and grandparent program totals are also recalculated when the program is part of a hierarchy.
- The Update Program Performance Data process updates programs matching your criteria. The performance for the assigned projects is updated first and then summarized and calculated for the program. Parent and grandparent program totals are also recalculated when the program is part of a hierarchy. Use this process for ad hoc requests and to refresh program totals when making changes to program options and currencies.

## Program Manager Preference

When you change the default values, the application saves your preferences. Preferences include headline insights, currency, and analysis views for progress and financial measures. You can also create one custom analysis view.

# How Project Calendars Are Mapped to Program Calendars

You select the program calendar and mapping method using the Manage Program Options task in the Setup and Maintenance work area. Let's say the program uses the standard monthly calendar and the project uses the fiscal 4-4-5 calendar.

Here's a table explaining how project periods map to program periods if their calendars are different.

### *Example of calendar mapping between project and programs*

Project Calendar	Program Calendar	How Mapping Method Works
Period Name: Feb-FY2022 Period Start Date: January 30 Period End Date: February 26	Period Name: Jan-2022 Period Start Date: January 1 Period End Date: January 31	If you select the mapping method as start date, then January 30 is compared to the program period start and end dates to find the period that includes it. In this example, the project period Feb-FY2022 will map to Jan-2022 in the program calendar.



Project Calendar	Program Calendar	How Mapping Method Works
	Period Name: Feb-2022 Period Start Date: February 1 Period End Date: February 28	If you select the mapping method as end date, then February 26 is compared to the program period start and end dates to find the period that includes it. In this example, the project period Feb-FY2022 will map to Feb-2022 in the program calendar.

## How do performance measures help me analyze programs?

Performance measures help you assess the efficiency and effectiveness of a program, which leads to better insight into its performance. Performance measures help program managers perform a range of tasks, including:

- **Identifying areas for improvement:** Program managers use performance measures to identify areas where a program needs improvement. They track deviations in expected performance measure numbers, such as actual work plan effort and work plan complete percentage, to identify issues and work to improve them.
- **Monitoring program progress:** Performance measures enable program managers to monitor program progress over time. Program managers can track performance metrics to determine whether a program is meeting its objectives, and identify action plans to expedite progress toward program goals.
- **Evaluate program success:** Performance measures help the program manager evaluate program success by comparing performance metrics to agreed upon benchmarks or goals.
- **Allocate resources to specific projects or tasks:** Performance measures help program managers flexibly allocate resources to projects or tasks as required. Program managers can analyze program performance metrics to identify areas that require additional resources or investment, as well as those areas that have more resources than required.

Program managers can use insights drawn from program analysis to recommend actions to project managers.

### Example

Let's say a hospital is constructing a new wing. Here's how performance measures, such as budget cost and cost variance, can help analyze this program:

- **Track budget cost:** Program managers can compare planned construction and equipment numbers against actual costs to check whether the hospital wing construction program is within budget. In simple terms, budget cost reviews help program managers ensure that implementation costs don't exceed the assigned budget.
- **Identify budget overruns:** Program managers can use task and project level cost variance (the difference between the planned and actual costs associated with a project) to see when—and where—a program is going over budget. For example, if the planned costs associated with a specific task is \$200,000, but the task needs \$30,000 more, the program manager can identify the cost variance, do a quick root cause analysis, work to manage the underlying problems, and communicate unavoidable additional requirements to stakeholders if necessary.
- **Identify opportunities for improvement:** Budget cost and cost variance numbers also help the program manager identify opportunities for performance improvement. For example, if program managers can see that

cost variance is consistently high in specific tasks, they can review task progress, effort, and costing numbers to quickly identify issues and work to manage them.

- **Evaluate program success:** As task after task gets completed, and project teams start signing off, the program manager can review budget cost and cost variance numbers in combination with time and effort details to quickly assess whether the program is on track for successful completion.

Program managers can similarly use other program performance measures to identify issues as they emerge, track performance and expenditures, identify areas for improvement, evaluate program success, and so on.

## How can I manage programs using the Oracle Visual Builder Plugin for Microsoft Excel?

Use Oracle Visual Builder Plugin for Microsoft Excel to quickly create and update programs, program stakeholders, and program projects.

Oracle Visual Builder Add-in for Excel integrates Microsoft Excel spreadsheets with your web application to retrieve, analyze, and edit business data from the application. You download your data to an Excel spreadsheet, work with it, and then upload your changes back to the service.

### Download and Install the Oracle Visual Builder Plugin for Microsoft Excel

For guidance on installing the Oracle Visual Builder Plugin for Microsoft Excel, see [Install Oracle Visual Builder Add-in for Excel](#) in the [Developing Integrated Spreadsheets Using Oracle Visual Builder Add-in for Excel](#) guide.

If you have downloaded and installed VBAFE, but the Oracle Visual Builder ribbon tab doesn't appear:

1. Click **File > Options > Add-ins** in Microsoft Excel. The list of available Excel add-ins appears.
2. Select **Oracle ADF Desktop Integration Add-in for Excel** from the list of add-ins.
3. Click the **Manage** field below the list of add-ins, select **COM Add-ins**, and click **Go**. The COM Add-ins modal appears.

Select the **Oracle Visual Builder Add-in for Excel** check box and click **OK**.

The Oracle Visual Builder ribbon tab appears, and you can start using it to create and update programs as required.

### Download the Manage Programs XLSM File

Once you have VBAFE installed, download the [Manage Programs XLSM file](#), which we've designed to simplify work with Program Management data.

If you do not want to use the Manage Programs XLSM file and wish to use the Oracle Visual Builder plugin directly with Excel, see the [Introduction to Oracle Visual Builder Add-in for Excel](#) topic in the [Developing Integrated Spreadsheets Using Oracle Visual Builder Add-in for Excel](#) guide.

### Set up the Manage Programs Spreadsheet

The VBAFE spreadsheet comprises three worksheets:

- **Project Programs:** Enables you to manage your programs.
- **Program Stakeholders:** Enables you to manage stakeholders associated with your programs.

- **Program Projects:** Enables you to manage projects associated with your programs.

**Note:**

- You cannot use the VBAFE spreadsheet to create projects and their properties. You can only assign them to programs or delete these assignments.
- Some of the cells in these sheets display a list of values when clicked. You will be asked to log into your account before these LOVs can be displayed, though.
- The last column in each worksheet is the Key This is an internal column, and it is important that you do not edit this field.

Click on each column header to learn more about it.

## Log into Your Account

You will be asked to log into your account once, either when you attempt to connect to your instance, or when you land on a cell that displays an LOV. Enter your **User Name** and **Password** in the fields provided to log into your account.

## Connect to Your Oracle Applications Instance

You must connect the Manage Programs XLSM file to your Oracle Applications instance to access the data associated with your account.

1. Navigate to the **Oracle Visual Builder** ribbon tab.
2. Click the **Manage Catalogs** button on the left side of the toolbar.

The Manage Business Object Catalogs modal appears. By default, the list of business objects that you need to work with programs is already populated. However, you must connect to your Oracle Applications instance before you can manage your data.

3. Select the **projectPrograms** catalog and click **Edit Business Object Catalog**.

The Business Object Catalog Editor modal appears.

4. In the **General** tab, update the **Host** field using the URL of your environment and click **Done**.

For example, if the URL that appears in your address bar when you log in is `https://fa-abcd-pintlabfadev.fa.ocs.oc-test.com/fscmUI/faces/FuseWelcome?_afrLoop=XYZ`, enter the following in the Host field:  
`https://fa-abcd-pintlabfadev.fa.ocs.oc-test.com`.

5. Click **Done** in the Manage Business Object Catalogs modal.

Your Excel sheet is now connected to your Oracle Applications environment.

## Download Your Program Data

To download your program data, click the **Download Data** button in the Oracle Visual Builder toolbar.

You are now ready to start making updates to your program, stakeholder, and program project details.

## Create a Program

To create a program using the Excel sheet:

1. Open the **Project Programs** sheet in the Program Management XLSM file.
2. In a new row, enter the **Program Name** and **Program Number** of the program that you want to create, in the columns provided.
3. Click the cell corresponding to the **Program Status Name** and select the new program's initial status.
4. Update additional details using the other columns provided, as appropriate.
5. You can create multiple programs similarly.
6. Once you're ready to upload your changes to your environment, click **Upload Changes**. The plugin now attempts to create your programs using the details you provided and displays the status of the operation once done.

## Update a Program

To update the details associated with a program:

1. Open the **Project Programs** worksheet and navigate to the row that contains the program details that you want to update.
2. Edit the **Program Name** in the columns provided. You can't update the program number.
3. Click the cell corresponding to the **Program Status Name** and update the program's status as required.
4. Update additional details using the other columns provided, as appropriate.
5. You can update multiple programs similarly.
6. Once you're ready to upload your changes to your environment, click **Upload Changes**. The Oracle Visual Builder plugin now attempts to update your changes and displays upload details once done.

## Delete a Program

To delete a program:

1. Open the **Project Programs** worksheet and navigate to the row that contains the program details that you want to delete.
2. Click the **Table Row Changes** button in the Oracle Visual Builder ribbon tab and, from the options that appear, select **Mark for Delete**.

The word 'Delete' appears in the Change column associated with the row.

**Note:** If you want to cancel the deletion, delete the word 'Delete' in the Change column.

3. You can similarly select multiple programs for deletion.
  4. Once you're ready to upload your changes to your environment, click **Upload Changes**.
  5. A warning message asks you to confirm the deletions. Click **Yes** to proceed.
- The Oracle Visual Builder plugin now attempts to delete the programs you selected and displays the status of the operation once done.

## Manage Program Stakeholders and Members Using the Oracle Visual Builder Plugin for Microsoft Excel

To associate stakeholders and members with a program:

1. Open the **Program Stakeholders** sheet.

2. In a new row, enter the **Person ID**, **Access Type Code**, and **Program ID** to respectively specify a person, their access level to a program, and the ID of the program with which they must be associated.

**Note:** You must ensure that the combination of values in the Person ID, Access Type Code, and Program ID fields are unique; otherwise, the Create operation fails.

3. You can similarly add multiple stakeholders to multiple programs.
4. Once you're ready to upload your changes to your environment, click **Upload Changes**. The Oracle Visual Builder plugin now attempts to create program stakeholders using the details you provided and displays the status of the operation once done.

**Note:** When your update is done, the plug-in automatically displays the first (Project Programs) worksheet. You must navigate to the Program Stakeholders worksheet to view your updates.

Once you've added a stakeholder to a program, you can only update the stakeholder's Access Type Code. To do so, navigate to the cell that contains the detail, select the updated access type code, and click **Update Changes**.

## Associate Projects with Programs

To associate a project with a program:

1. Open the **Project Programs** sheet.
2. Navigate to the last row in the list of records retrieved.
3. In a new row, enter the **Project ID** and **Program ID** to specify the project that must be associated with a program.

**Note:** You must ensure that the combination of values in the Project ID and Program ID fields are unique; otherwise, the create operation fails.

4. You can similarly associate multiple projects with multiple programs.
5. Once you're ready to upload your changes to your environment, click **Upload Changes**. The Oracle Visual Builder plugin now attempts to create project-program associations using the details you provided and displays the status of the operation once done.

**Note:** When your update is done, the plug-in automatically displays the first (Project Programs) worksheet. You must navigate to the Program Stakeholders worksheet to view your updates.

You can update the values in the Project ID and Program ID fields to update project-program associations as required.

## Remove Projects from Programs

To remove a project from a program:

1. Open the **Program Projects** worksheet and navigate to the row that contains the project-program association that you want to remove.
2. Click the **Table Row Changes** button in the Oracle Visual Builder ribbon tab and, from the options that appear, select **Mark for Delete**.

The word 'Delete' appears in the Change column associated with the row.

**Note:** If you want to cancel the deletion, delete the word 'Delete' in the Change column associated with the row.

3. You can similarly select multiple project-programs associations from deletion.
4. Once you're ready to upload your changes to your environment, click **Upload Changes**.

5. A warning message asks you to confirm the deletions. Click **Yes** to proceed.

The Oracle Visual Builder plugin now attempts to delete the project-program association you selected and displays the status of the operation once done.

## How can I manage action plans and action items?

Use action plans to identify tasks that must be performed to accomplish program or project goals.

You can create one or more action plans for a project or program. Each action plan can have one or more action items. Thus, action plans can help you create a blueprint for the entire program. You can also use action plans to quickly address specific challenges that may emerge during program / project implementation.

To create an action item, you must first create an action plan and then populate it with action items. You can flexibly assign an action plan to a person, and action items in that plan to other people as required. When you create an action plan or action item and assign them to project managers or team members, they can view the assigned action plans or items by navigating to **Projects > My Work**.

### Creating Action Plans

You can create an action plan either from the Program Headlines page, or from the Program Analysis page.

#### Creating Action Plans from the Program Headlines page

On the Headlines page, select the program that you want to review. The page loads performance data of the program you selected and displays them as cards and graphs. You can now create three kinds of action plans for that program:

- Action plans for any aspect of a program or its projects
- Action plans dedicated to a specific aspect of a program's performance
- Action plans based on insights on one of a program's projects

#### Creating Action Plans for Any Aspect of a Program or its Projects

1. Click the **Action Plan** card. This is the last card on the right.

The Action Plan section appears.

2. Click **Create Action Plan**.

The Create Action Plan side panel appears. Use this side panel to create action plans for the entire program or for any project associated with the program.

#### Creating Action Plans for a Specific Aspect of a Program's Performance

Say you want to create an action plan to increase the margin associated with a specific project in a program.

1. Click the **Margin** card to view visualizations of the program's performance from a margins perspective.
2. Right-click on the graphic that represents the under-performing project, and select **Create Action Plan**.

The Create Action Plan side panel appears. Use this side panel to create action plans for the project you selected.

Note that:

- The **Project** field displays the project you selected. You can change it, though.
- The **Summary** field reads **Margin analysis**. You can update this as well.
- The **Description** field offers margin-related details associated with the project you selected. Note also that when you change the value in the **Project** field, the margin values in the Description field get updated to display margin data associated with the project you selected.

### Creating Action Plans using the Insights Button in the Program Headlines Page

The Insights button enables you to view an AI-generated executive summary of the status of the program you selected in the Headlines page. The Insights side panel also displays performance analysis of each project in the program and enables you to create separate action plans for each project.

To view insights associated with your program and its projects:

1. In the Program Headlines page, select the program about which you want to know more.
2. Click the **Insights** button to view insights associated with the selected program and its projects.

**Note:** The Insights feature uses Oracle AI to generate brief summaries and performance details of the program and its projects, and it may take a few seconds for the generated content to appear.

3. Review the program and project summaries generated and click **Actions > Create Action Plan** under each project summary to create an action plan for that project.

**Note:** You can't create action plans at the program level using the Insights side panel.

### Creating Action Plans from the Analysis Page

The Analysis page lists performance details of all your active programs.

1. Click a program to view its projects and their performance details.
2. To view action plans for a program or project, click the corresponding ellipsis icon in the **Actions** column and select **Action Plans**.

If you haven't created any action plans for that project or program yet, the Create Action Plan side panel appears; but if that program or project already has action plans, the Manage Action Plans side panel appears. Click **Add** to create an action plan.

## Accessing Action Plans

To access action plans associated with a program: Navigate to the Headlines page, select a program, and click the **Action Plan** card. You can also navigate to the Analysis page, select a program, and use the **Action** options to view your action plans.

## Deleting Action Plans

To delete an action plan, click the **Delete** icon on the right end of the row representing an action plan.

**Note:** You can't delete action plans that have a status of **In Progress** or **Closed**.



## Program Communications

### How do program communication templates and reports work together?

A program communications report offers details associated with a program's progress. At the back-end of each report lies a report template.

Program managers use performance measures, text, and other elements, such as graphs, to create these templates in the Program Management application. For details on how to create a report template, see [How can I create a program communications report template?](#)

When program managers use a template to create a report for a program, the application runs data associated with the program on the elements in the template, creating a report that contains data unique to the program.

Templates, therefore, contain all the details that appear in a report. When you edit a report, you can only edit the report's properties. To edit its contents, you must edit the template used with the report.

### How can I create a program communications report?

Program communications reports help you ensure that your stakeholders are kept updated of the latest status of your programs.

To create a program communications report:

1. Navigate to **Programs > Communications** and click **Create Report**. The Create report side-panel drawer appears.
2. Select the **Program** for which you want to create a report, and give the report a **Name** and a **Description**.
3. If the currency that you want to use in the report is different from the default currency associated with the program, select the **Currency** that you want to use in the report.
4. Specify the **Reporting Period** that you want to use for the report.

Select the report-through period as the current period or the last period. For example, you can review the report data for April during the first few days of May when your monthly communication report is set with a reporting period value of Last and the first due date is May 5th. When ready, you can manually publish the report by the due date, or it will automatically publish on May 5th if your report is configured to automatically publish on the report due date.

5. Use the **First Due Date** to specify when the first report is due, and specify the **Frequency** with which you want the report published.

The frequency and first due date of a report determine the report's due date. The numerical date in the first due date is used for monthly, quarterly, and yearly frequencies. To set a report due date for the end of the month, pick the 31st of any month earlier than today. The due date is automatically adjusted for shorter months. If using weekly and bi-weekly frequencies, the date's day of the week determines the due date.

6. If you want the application to publish the report automatically on the dates and frequency you specified, select the **Publish automatically on the due date** checkbox. You can pause and resume automatic publishing as required.



7. Click **Create Report**. You must now search and select the template that you want to use for your report.

## Searching and Using Report Templates

To search for an existing template:

1. Enter the name or owner of the template, and press **Enter**. Templates that match your search criteria appear.
2. Click on each template to preview it on the right side of the page.
3. Either click **Start from Scratch** to create a new template for your report, or select a template and use the **Start from Existing** options to specify how you want to create your report.
  - a. If you want to use the existing template as-is, click **Start from Existing > Use Existing**. The application generates your report and displays it in the Communications page.
  - b. If you want to start a new template from a copy of an existing template, click **Start from Existing > Modify Existing**. The template opens in Edit mode, and you can modify its contents as required before you publish your report using the new template. For details on working with templates, see *How can I create a program communications report template?*
4. Click **Refresh Report** to view the working draft of your report with the latest data. Report data is automatically refreshed when performance is collected for the program—or its projects—using the **Update Project Performance Data** process. When you click Refresh Report, the application triggers the Update Program Performance Data process.
5. After you have completed designing your report, click **Publish Report**.

### Note:

- Once you publish your report, you can't delete it, and it remains available to stakeholders.
- Publish a report only after you have reviewed the content, updated any free-form text fields, and selected the program health value, if you've added this element.
- When you publish a report, the application automatically creates a working version.

Once your report is published, stakeholders and program managers who have access to your program can download your report and add comments in the Headlines page.

## How can I create a program communications report template?

Program communications templates enable you to design the contents and layout of your program communications reports.

To create a program communications template:

1. Navigate to **Programs > Communications** and click **Actions > Create Template**. The Create template side-panel drawer appears.
2. Enter a **Name**, and optionally, a **Description** of the template.
3. If you want to use a custom BIP file for your template, enter the complete location, including the file name and .xdo extension, of the **BIP file** in Oracle Business Intelligence Publisher. Example: **/Custom/Projects/LandscapeExecutiveCommunication.xdo**. For detailed guidance on creating and designing reports using Oracle Business Intelligence Publisher, see Design Reports in Oracle Business Intelligence Publisher documentation.

4. Click **Create Template**. Your template details are saved, and you must now populate your template with program and project-related details.
5. On the page that appears, search for and select the template that you want to use as the base for your new template.

## Adding Content to your Report Template

Report templates in Program Management use pre-set components, which you can easily search and add to your template. These components are organized into content types, which are available as tabs in the Add content section.

You can add the following types of content to your report templates:

- **Groups:** Groups are flexible groups of metrics and text that you can create and reuse in your templates.
- **Metrics:** Each metric in this tab represents a program performance measure, which you can include into your template.
- **Text:** These are static text elements, such as display text, headings, enterable paragraph, automatically generated program executive updates, and so on, that you can add to your template.
- **Others:** These are prebuilt charts and tables that you can add to your template with a single click.

To add a component to your template, navigate to the appropriate tab, and search and click on components that you want to add to include them in the template.

## Updating Report Template Components

After you add a component to a report template, click its handle on the top-right to edit, move, duplicate, or remove it. Depending on the nature of the component, the edit options you encounter may be different.

When you include a group to your template, you can separately edit each component in the group.

## Publishing Report Templates

Once you're satisfied with your template, click **Publish Layout** to update the template and make it available to you for use in reports.

# How can I include an autogenerated program status summary in my program communications report?

To include an autogenerated program status summary in your program communications report:

1. Add the Program Executive Update report template component to your report template. For more information, see [How can I create a program communications report template?](#)
2. Create a report that uses the updated template. For more information, see [How can I create a program communications report?](#)
3. Edit the report and click the **Generate** button in the Program Executive Update component in your report to generate the program status summary using Oracle AI.

## FAQs for Project Programs

### Can I move a project or program under another program?

Yes. Select the project or program from the list on the Programs page and drag and drop it under the program you want to. You can assign a project just once in a hierarchy.

You can't move a program if:

- The move exceeds a maximum of three levels in the program hierarchy.
- You are making the existing child program as the parent of the selected program.

### Can I change the performance measure names for program analysis and insights?

Yes, you can modify the measure names and the default display values, in the Analysis and Insights UI, using the Manage Performance Measures task.

### How can I specify additional details that must be provided while creating a program?

If you want to create custom fields to capture additional program details, you must get them deployed for your organization, so they are available in both the user interface and the Project Program REST API.

For example, if you want program managers in your organization to capture the name of the business unit associated with a program, ask your Projects administrator to deploy Business Unit as an additional field in the Create Program interface. Once this field is deployed, it will be available in the user interface as well as in the Project Program REST API, and program managers will be able to capture this detail when they create a program.

