Oracle® Hospitality Forecasting and Budget
User Guide

Release 8.5

ORACLE®

Oracle Hospitality Forecasting and Budget User Guide, Release 8.5

E72216-02

Contents

1   Getting Started

2   Using Forecasting and Budget

3   Configuring Forecasting and Budget

4   Configuring and Scheduling Events

Preface

This document describes how to use Oracle Hospitality Forecasting and Budget features and functionality.

Audience

This document is for all Oracle Hospitality Forecasting and Budget users.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

https://support.oracle.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at http://docs.oracle.com/en/industries/hospitality/.

Revision History

Date	Description of Change
August 2016	Initial Publication
November 2021	Updated Creating a Forecast Profile section with a definition for Number of History Weeks to Check.

1
Getting Started

The Oracle Hospitality Forecasting and Budget application allows you to configure and apply algorithms and historical data to forecast future inventory and labor needs. For example, if a restaurant wants to prepare for an upcoming holiday weekend, the system uses historical Net Sales data:

- Based on a typical weekend shift requiring 8 servers, 2 bartenders, and 2 hostesses, the system forecasts a staffing requirement of 10 servers, 3 bartenders, and 3 hostesses.

- Based on a typical weekend sales count of 25 hamburgers, 14 salmon dinners, and 22 grilled chicken entrees, the system forecasts an inventory requirement for the preparation of 32 hamburgers, 18 salmon filets, and 28 chicken breasts.

This document provides information and instructions for:

- Configuring the forecasting settings, behavior, and parameters.
- Generating the forecasts.
- Planning, creating, and scheduling promotions and events.

2
Using Forecasting and Budget

This part of the *Oracle Hospitality Forecasting and Budget User Guide* is intended for end users. An example of an end user is a restaurant manager who regularly runs forecasts and uses the forecast data to make operational decisions.

Manual Forecasts

You can manually generate a forecast when an organization requires a forecast immediately. You can only generate a manual forecast for any future week-long period, and the system uses the current fixed period of data.

For example, an organization with a Monday-to-Sunday business week is configured to generate a forecast for the upcoming week every Thursday and requires a manager to approve the forecast. If the manager is out of the office and unavailable to approve the forecast, an authorized user can manually generate a forecast for the following week.

Forecast Approval

The organization can configure approval requirements for forecasts at the location or revenue center level. If you approve or reject a forecast for a location, all revenue centers that belong to the location show the same status. The following list describes the available approval statuses:

- **Generated**: The system has generated the forecast but it has not been approved or rejected.
- **Pending**: The forecast has been approved but is still awaiting approval or rejection by all persons responsible. For example, if a location has multiple revenue centers and you approve the forecast for one revenue center, the system sets the status to Pending until all other revenue centers approve.
- **Approved**: The forecast has been approved and locked from changes. To edit the forecast, you must have the correct privileges, change the status from an approved or rejected state, make the changes, and then re-submit the forecast for review.
- **Rejected**: The forecast has been rejected and sent to the creator for changes and re-submitting.

You cannot configure forecast approval at the organization level or the forecast component level.

Using the Basic View for Forecasts

If more than one profile is assigned to location/revenue center, then you must use the Advanced View.

1. In Reporting and Analytics, click **Forecasting**, click **Forecast**, click **View or Adjust Forecast**, click the forecast you want to view, and then click **Basic View**.
2. Specify the following parameters for the generated forecasts, and then click **Display**.

Table 2-1   Forecast View Parameters

Parameters	Description
Location	Specify the location for the forecast you want to view or adjust.
Revenue Center	Specify the revenue center for the forecast you want to view or adjust.
Week	Specify the week for the forecast you want to view or adjust.

3. Use the Day and Day Part tabs to filter the forecast information you want to see. The following table describes the information presented:

Table 2-2   Forecast Components Information

Column	Description
Forecast Components	Lists the available forecast components.
Forecast	Displays the forecasted values for the forecast component
Adjusted Forecast	Displays the adjusted forecast.
Cumulative Adjustment Percent +/-	Shows the percentage of adjustment. Increases are shown with a plus (+) symbol and decreases are shown with a minus (-) symbol.
Cumulative Adjustment Amount +/-	Shows the monetary amount of adjustment. Increases are shown with a plus (+) symbol and decreases are shown with a minus (-) symbol.
Actual	Displays the actual amount of the forecast component.
Rating	Displays the rating, based on the configuration of percentages in the Forecast Performance section of Forecasting Admin.
Reason	Displays a reason if the rating displayed requires a reason.

4. To add adjustments to the forecast, fill out the form and click **Save**. You can select an adjustment and click **Delete** to remove adjustments.

Table 2-3   Forecast Adjustments

Field	Description
Reason Category	Select a reason category for the adjustment.
Reason	Select a reason for the adjustment.

Table 2-3   (Cont.) Forecast Adjustments

Field	Description
Adjustment %	Enter a percentage amount or a monetary amount by which to adjust the component. Enter a minus sign before Adjustment % to produce a decreased forecast.
	If you enter a value in the Adjustment % field, the Adjustment Amount will update, and vice versa.
	If you adjust one component, any components with a linked relationship will also update; for example, if Net Sales and Discounts have a 1-to-1 relationship, meaning that whatever amount/percentage Net Sales is adjusted, Discounts will be adjusted by the same, then, when you enter a 15% adjustment for Net Sales, Discounts will also be adjusted by 15%. This relationship is established in Forecast Profiles. If there is no relationship(s), then only the one forecast component will update.
Adjustment	Enter a percentage amount or a monetary amount by which to adjust the component. Enter a minus sign before Adjustment to produce a decreased forecast.
	If you enter a value in the Adjustment % field, the Adjustment Amount will update, and vice versa.
	If you adjust one component, any components with a linked relationship will also update; for example, if Net Sales and Discounts have a 1-to-1 relationship, meaning that whatever amount/percentage Net Sales is adjusted, Discounts will be adjusted by the same, then, when you enter a 15% adjustment for Net Sales, Discounts will also be adjusted by 15%. This relationship is established in Forecast Profiles. If there is no relationship(s), then only the one forecast component will update.
Comment	Enter a comment to explain the adjustment.

5. Click **Submit**.

Using the Advanced View for Forecasts

1. In Reporting and Analytics, click **Forecasting**, click **Forecast**, click **View or Adjust Forecast**, click the forecast you want to view, and then click **Advanced View**.

2. Specify the following parameters for the generated forecasts, and then click **Display**.

Table 2-4   Forecast View Parameters

Parameters	Description
Location	Specify the location for the forecast you want to view or adjust.
Revenue Center	Specify the revenue center for the forecast you want to view or adjust.
Week	Specify the week for the forecast you want to view or adjust.

3. Specify filters for the generated forecast, and then click **Display**.

Table 2-5   Forecast Filters

Filter	Description
Forecast Component	Select a forecast component from the drop-down list.
Order Type	Specify the order type.
Major Group/Family Group/Menu Item	Specify the Major Group/Family Group/Menu Item for the generated forecast you want to view or adjust.

4. You can view and adjust the forecast based on the parameter and filter criteria. You can drill down the forecast components for more detailed and specific information.

   a. **Adjust Absolute Value**: Enable this option to edit fields in the forecast display grid to change/update values. The values in the fields will be displayed as whole values. You must save updates when moving from grid to grid.

   b. **Adjust Percentage Value**: Enable this option to edit fields in the forecast display grid to change/update percentages. The values in the fields will be displayed in their percentage format. You must save updates when moving from grid to grid.

5. Click **Submit**.

Generating a Manual Forecast

1. In Reporting and Analytics, click **Forecasting**, click **Forecast**, click **Other Forecast Functions**, and then click **Generate Manual Forecast**.

2. Fill out the form to specify the forecast parameters, and click **Generate**.

Changing the Approval Status of a Forecast

1. In Reporting and Analytics, click **Forecasting**, click **Forecast**, and then click **Forecast Approval/Rejection**.

2. Specify the parameters for the generated forecasts, and then click **Display**.

3. For each forecast, select the new approval status from the **Status** drop-down list, and then click **Apply**.

3

Configuring Forecasting and Budget

This part of the *Oracle Hospitality Forecasting and Budget User Guide* is intended for system administrators. A system administrator uses enterprise business requirements to configure and calibrate forecasting for an organization. Forecast configuration consists of:

- Creating and configuring forecast profiles.
- Assigning profiles to locations and revenue centers.
- Configuring historical data for new locations or revenue centers.
- Configuring the percentage which users and user roles can edit forecast profiles.

For example, if you create a new location or revenue center, you can configure forecasting by:

1. Assigning a historical data seed to the location or revenue center.
2. Selecting an existing forecast profile, or creating a new forecast profile to fit the specific requirements.
3. Assigning up to four profiles to the new location or revenue center.
4. Configuring the edit restrictions for the profile.

You can configure the variance parameters for evaluating the performance of forecasts based on actual amounts. You can use this feature to set ratings for variance ranges and to require a reason, such as when a rating far exceeds a forecast.

Forecast Profiles

A forecast profile is a forecasting template that you can assign to locations or revenue centers. The profile consists of the following items:

- The workflow to control rules and behaviors for submitting and generating forecasts.
- The algorithm, or the mathematical formula, used to generate forecasts based on historical data and information input by a user. You can configure the formulaic weight of historical data relative to manually input data.
- The components that determine the projected values for generated forecasts.

You can configure and view the values for the following forecast components:

- Gross Sales (automatically generated)
- Net Sales
- Discounts
- Checks
- Table Turns
- Average Check (automatically generated)
- Open Check Guest Count

- Closed Check Guest Count

- Guest Present

- Sales Quantity

- Sales Net VAT before Discount (Advanced View only)

- Sales Net VAT after Discount (Advanced View only)

Historical Seed Data

You cannot forecast data for new locations due to the lack of existing data. To resolve this issue, you can assign data from other stores to generate accurate forecasts. For example, if a restaurant chain opens a new location inside a shopping mall, they can assign the type of sales and revenue generated from a similar location. The organization can assign as many weeks necessary until the new location generates enough data to create location-specific forecasts.

Creating a Forecast Profile

1. In Reporting and Analytics, click **Forecasting**, click **Forecasting Admin**, click **Forecast Configuration**, and then click **Forecast Profiles**.

2. Click **Add**, and then enter a name and description for the forecast profile.

3. Select whether to set the forecast profile as the default profile, and select whether to enable the forecast profile for use with Oracle Hospitality Inventory Management.

4. Fill out the form, and then click **Save**:

   a. Configure the workflow behavior:

   Table 3-1   Workflow Behavior Settings

Workflow Behavior	Description
Enable Auto Submit	Submit generated forecasts without requiring authorization.
	For example, if a forecast needs to be generated when the manager is out, the system generates a forecast.
	If this option is enabled, specify the number of hours before the start of the next business week to submit the forecast.
Enable Auto Approval	Approve submitted forecasts without requiring authorization.
	For example, if a forecast needs to be approved when the approving manager is out, the system approves the forecast.
	If this option is enabled, specify the number of hours before the start of the next business week to approve the forecast.

Table 3-1   (Cont.) Workflow Behavior Settings

Workflow Behavior	Description
Enable Manual Forecast to Overwrite Auto-Generated Forecast	Enable this option to allow a user to overwrite an auto-generated forecast with a manually-generated forecast.
Enable Partial Forecast Generation	Enable this option to generate partial forecasts. If the system does not find **Number of Past Weeks to Average** data, the forecast generates based on the amount of available data.

b. Configure the forecast algorithm:

Table 3-2   Forecast Algorithm Settings

Algorithm Option	Description
Moving History	Select this option to apply data from the same day last year toward generating new forecasts.
Moving Percentage Weight	Define the percentage weight of the moving history. For example, if you want 25% of the forecast to be determined by data from the previous year, enter 25. The remaining 75% of the forecast will be generated based on the data from the number of weeks specified.
Number of Weeks to Forecast	Enter a number of weeks between 1 to 8 for which to generate a forecast.
Number of Past Weeks to Average	Enter a number of past weeks between 1 to 14 to use towards generating forecasts.
Number of History Weeks to Check	Enter the number of weeks for which you want the system to check for data when generating forecasts. Consider the impact of business schedules on the data used to generate the forecast. For example, you set this value on May 31 and you set it to 6 weeks. Your outdoor patio revenue center is only open from May 1 to September 30. Since there is no data when the patio is closed from October through April, the system works backwards from April 30 until a total of 6 weeks of data is available to generate the forecast. In this example, the data comes from May 1-31 and September 15-30.
Ignore Lowest	Enable this option to drop the lowest weekly data from the generated forecast.
Ignore Highest	Enable this option to drop the highest weekly data from the generated forecast.

c. Configure the forecast components:

Table 3-3   Forecast Component Settings

Component Option	Description
Enable Item Level Forecast	Enable this option to use the Sales Quantity of menu items for generating forecasts.
View	Enable this option to view the fields in the expanded view.
Default View	Enable this option to view these fields on a generated forecast regardless of the view status. Any component enabled with default view uses the view status.
Allow Manual Adjustment	Enable this option to allow manual adjustments for this component after it has been generated.
Precision	Enter the number of decimal points to show (for example, `2 = 5.99. 3 = 5.999`).
Auto Adjustment Linking	If you enable this option, the system replicates changes to a component for all linked components.

Assigning a Forecast Profile to an Organization Level

1. In Reporting and Analytics, click **Forecasting**, click **Forecasting Admin**, click **Forecast Configuration**, and then click **Assignment to Organization Level**.

2. For each location or revenue center:

   a. Click the related profile cell and select a forecast profile from the drop-down list.

   Assign a **Primary Profile** to generate forecasts for the location or revenue center. You can assign more than one profile to a location or revenue center when using the Advanced Editor.

   b. Select **Link** to link additional profiles to the location or revenue center.

   This option allows an organization to replicate changes to a profile across a location or revenue center.

   For example, a location with **Link** enabled is assigned the Airport Locations primary profile and Domestic Locations as profile 2. Both the Airport Locations profile and the Domestic Locations profile are configured to generate forecasts for three weeks. If the organization updates the Airport Locations profile to generate forecasts for two weeks, the system updates the Domestic Locations profile to generate forecasts for two weeks.

3. Click **Save**.

Assigning Historical Seed Data

1. In Reporting and Analytics, click **Forecasting**, click **Forecasting Admin**, click **Forecast Configuration**, and then click **Assignment to Organization Level**.

2. Click the **Seed** icon to retrieve historical data from a location.

3. Click **Add**. The form populates with the selected historical data.

4. Update the form, and then click **Save**.

Configuring Forecast Edit Restrictions

1. In Reporting and Analytics, click **Forecasting**, click **Forecasting Admin**, click **Forecast Configuration**, and then click **Forecast Edit Restrictions**.

2. For each user or role, enter the edit restriction percentage, and then click **Save**.

   For example, you can assign a zero percentage to users who should not have the ability to edit a forecast. If you assign a percentage of 5%, the user can edit the forecast above and below the generated value by 5%. Leaving the field blank allows the user role the ability to edit a generated forecast between -100% to +1000%.

Configuring Forecast Retention

1. In Reporting and Analytics, click **Forecasting**, click **Forecasting Admin**, click **Forecast Configuration**, and then click **Assignment to Organization Level**.

2. Click **Options**, set the number of weeks that you want the system to retain forecast outputs, and then click **Save**.

Configuring Forecast Performance

1. In Reporting and Analytics, click **Forecasting**, click **Forecasting Admin**, click **Performance Configuration**, and then click **Forecast Performance**.

2. Fill out the form as described in the following table, and then click **Save**.

Table 3-4   Forecast Performance Settings

Forecast Performance	Description
Minimum Percentage and Maximum Percentage	Enter the range of the actual value relative to the forecasted value.
Rating	If the ratio of the actual value relative to the forecasted value falls within the specified range, forecasting assigns the corresponding rating to the forecast component for the day part or day.
Reason Required	If you enable this option, users must provide a reason in the View Forecast screen when generating a forecast.

4
Configuring and Scheduling Events

This part of the *Oracle Hospitality Forecasting and Budget User Guide* is intended for system administrators. A system administrator uses enterprise business requirements to configure and schedule events at either the organization level or at the location level.

Events are occurrences that might affect business trends. You can generate impact analysis reports and incorporate events into forecasting to calculate the impact on business trends and to generate accurate forecasts for non-standard business days.

Event Definitions

Event Definitions are event templates that you can assign and schedule. For example, you can configure a New Year Eve celebration event that offers food and drink at a discounted price. You can then assign the event to one or more locations in the organization, and schedule dates and times that the location implements the event.

You can configure the following types of events:

- Open/Close Location Events: Identifies the amount of revenue a location incurs based on the opening or closing of another location. For example, an organization consisting of quick service restaurants has three locations in a busy metropolitan area. If they open a new location in the same area, you can use this event type to forecast the revenue impact on the three existing locations.

- Promotional Events: Identifies the impact of an event intended to bring business, such as coupons, discounts, and happy hours. For example, if an organization that opened a new location offers a coupon that gives a guest 1 free cup of coffee, you can forecast the impact of the coupon on revenue.

- Other Events: Identifies the impact of events, such as sporting events or holidays, that can affect the type of sales a location might incur and require different methods of accounting for labor hours. For example, you can forecast labor for Christmas Eve, which can consist of a busy early dinner and an early drop off.

Calculating Future Impact Using Historical Impact

This calculation method determines the forecast for the next instance of an event based on the generated actuals from the previous instances of the event.

For example, a pizzeria wants to run a promotion in which people who attend a county basketball championship can present their ticket to receive a 50% discount on a large pizza.

- On the first day of the event, the forecast does not apply any modifications based on the calculation method. The normal forecasted net sales for the pizzeria on that day is $500, but due to the promotion, the pizzeria ends the day with a net sales of $600, for an impact of +20%.

- On the second day of the event, the forecast applies the +20% impact of the first day. The normal forecasted net sales for the pizzeria on that day is $520, so the post-

calculation forecast is $624. The pizzeria ends the day with a net sales of $598, for an impact of +15%.

- On the third day of the event, the forecast takes into account both days, resulting in a calculated future impact of 17.5%. As a result, if the normal forecasted sales for the pizzeria on that day is $500, the post-calculation forecast is $587.50.

Calculating Same Day of Week Impact Using Historical Impact

This calculation method determines the forecast for the next instance of the event based on the actuals generated from the previous instances of the event on the same day of the week.

For example, a pizzeria wants to run a promotion during the summertime offering a large three-topping pizza at lunch for $9.99 every Wednesday.

If **Use Historical Impact only if Event is Same Day of Week** is enabled, the forecast only calculates and applies the impact analysis on Wednesdays. If you do not enable this calculation method, the forecast calculates and applies the impact analysis on all days during the summer, not just Wednesdays.

Calculating Future Events Using Estimated Impact

This calculation method determines the forecast for the next instance of the event based on impact percentage, amounts, or absolute estimates entered by the user for one or more forecast components. This method does not incorporate historical data.

For example, a pizzeria estimates that the Net Sales forecast component will increase by 10%. If the typical Net Sales on a Friday evening is $2500, the calculation method applies the +10% increase for a forecasted Net Sales of $2750.

If the actuals for that Friday evening is $3000 and the pizzeria applies the same 10% estimate, the calculation method applies the +10% increase to the new Net Sales value of $3000, resulting in a forecasted Net Sales of $3300.

Impact estimates creating using this calculation method are applied as a one-time event. You can apply the event more than once, but the method does not automatically apply itself to future forecasts.

Creating an Event

1. In Reporting and Analytics, click **Forecasting**, click **Forecasting Events**, and then click **Event Definition**.

2. Click **Add**, fill out the following form, and then click **Save**.

Table 4-1   Event Definition Fields

Field	Description
Event Type	Select the event type to classify this event.

Table 4-1   (Cont.) Event Definition Fields

Field	Description
Hierarchy	Specify the location hierarchy based on the Oracle Hospitality Reporting and Analytics configurations.
Category	Specify the category based on the Oracle Hospitality Reporting and Analytics configurations.
Sub Category	Specify the sub-category based on the Oracle Hospitality Reporting and Analytics configurations.
Calculation Type	Specify the calculation type: • Use Historical Impact to determine Future Impact • Use Historical Impact only if event is same day of week • Use Estimated Impact for All Future Events
Add	If you select **Use Estimated Impact for All Future Events**, click **Add** to add forecast components and the respective estimated impact percentages from -100% to +1000%.

Scheduling an Event

1. In Reporting and Analytics, click **Forecasting**, click **Forecasting Events**, and then click **Event Definition**.

2. Select an event, and then click **Schedule Event**.

3. On the Assign to Locations tab:

   a. Use the **Select View** drop-down list to toggle the list of locations.

   b. Select the locations to which to assign the event.

4. On the Select Dates and Times tab, configure the times and dates for the event, and any recurrence settings.

5. On the Events Calendar tab, verify that the event appears as intended.

6. Click **Save**.