MT SaaS Workforce Management

Strategic Planners Guide

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About this guide

This document provides instructions on how to use the Workforce Management Strategic Planning application.

Intended audience

This guide is intended for users of Strategic Planner. It guides you through the steps to use Strategic Planner, a desktop solution for strategic resource planning.

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Document revision history

Revision	Description of changes
1.06	Updates include: • In the chapter, *Working with Work Queues*, in *Running the Simulator*, added a note that indicates that when the simulator is run and there are no staffing profiles for that queue, the forecasted ASA is set to the value set in the **Patience** field. • In the chapter, *Overview*, in *Strategic Planner Architecture*, added a subtopic called **Strategic Planner Log Files**, which describes where the Strategic Planner log files are stored.
1.05	Updates for V15.2 HFR7: • Minor updates.
1.04	Updates for V15.2 HFR3: • Updated with new document template.

Overview

In this section, you can find a brief overview of the Strategic Planner application, its planning activities, and architecture.

When you are importing or exporting to the Forecasting and Scheduling application for the first time, you will be prompted to login to the Workforce Management server.

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Welcome to Strategic Planner

Strategic Planner is installed on individual computers rather than being accessible over the network from any machine.

Strategic Planner enables multi-skilled contact centers to match resources with projected customer demand and corporate objectives by developing “what if” scenarios to determine trade-offs among costs, service levels, revenue, and staffing constraints.

There are many challenges to effective planning strategically in environments such as contact centers and back office operations units. How to hire, when to hire, what level of service to provide, are just some of the questions that face you.

The key elements to effective planning are:

- Creating accurate forecasts over time of volume and average handle time (AHT). If you cannot accurately forecast these, you cannot have any confidence in your staffing plans.
- Defining what resources you have. Which employees handle which interactions? Do they handle one interaction or many?
- Determining the effect of different staffing strategies. For example, does cross-skilling all of your employees increase all of the service levels for each of your work queues? What mix of cross-skilling would provide the highest likelihood that you can meet your service goals?
- The cost of differing strategies. At what mix of cross-skilling are the service levels highest and the costs lowest.

Flow of Planning Activities

To illustrate the levels of planning activities and how they fit together, let us look at each level separately.

First, you must plan strategically by taking the key elements described on the previous page and creating an overall plan and strategy for your business. Creating resource plans, and then hiring and training those resources, is all part of the strategic cycle.

Once the strategy is in place, in the tactical cycle you optimize those resources that you do have, which can be considered near-term planning. This planning involves increased granularity in traffic forecasts, and the creation of specific times and schedules when your resources should be working. Tactical planning is typically done on a monthly and weekly basis.

The last stage in this process is the crisis management cycle. This cycle is also part of planning, but requires reacting to the difference between the plans and the reality of the day. This cycle is measured in weekly, daily, or even hourly time frames.

If any of the previous steps in the planning process are inaccurate, more crisis management will likely be needed, often at a greater cost to your organization or business.

Strategic Planner Architecture

Strategic Planner can be used as a stand-alone product, where volume and AHT data are manually entered, or it can be integrated with the Workforce Management database to retrieve volume, AHT and distribution data, thus simplifying your planning efforts. Volume and AHT data can also be imported from a .csv file. (CSV stands for comma-separated values; the comma on a line delimits the various fields.)

You can export data from Strategic Planner to the Workforce Management database, where the Forecaster and Scheduler can make use of the data when creating forecasts.

The plans made with Strategic Planner are stored in .ltp files, which can be saved, edited, and emailed just like MS Word or WordPerfect files. These .ltp files, also called scenarios, can be seamlessly exported to MS Excel. These macro-enabled Excel files contain several spreadsheets detailing your scenarios and providing additional information in the form of both tables and graphs.

Strategic Planner Log Files

The Strategic Planner log files can be found in the following folder:
%USERPROFILE%\StrategicPlanner\Logs

The main log files are the **Planner.log** and the **PlannerConsole.log**.

Introducing Scenarios

You start Strategic Planner by double-clicking the desktop icon for Strategic Planner or by locating the application under Start > All Programs.

When Strategic Planner opens, you first see a splash screen, then the Strategic Planner menu bar (because there are no scenarios open).

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Scenarios

A scenario includes work queue statistics and staffing profiles.

Work queues are where you define the demands on your operation. These demands include:

- Volume
- AHT (Average Handle Time. AHT typically does not fluctuate for data for most operations work queues because the AHT is a set time standard)
- Distributions of volume
- Service levels you need to achieve
- Staffing requirements
- Over/under staffing
- Demand on space in terms of seat needs

Staffing profiles are where you define the attributes of your employee population in groups, or profiles. These include differences in your employee groups in terms of:

- Skills
- Wages
- Shrinkage
- How employees are hired and trained
- Attrition

Staffing profiles represent your supply planning and help to determine how to develop resource plans you need to deal with the demand.

Creating Scenarios

Usually, when you want to create a new scenario, you will do so by opening a reference scenario that you have already created, making changes to it, and renaming it when you save it (using **File..Save As**). This is a useful way to create new scenarios because you can capture all of the configuration details that you have entered before.

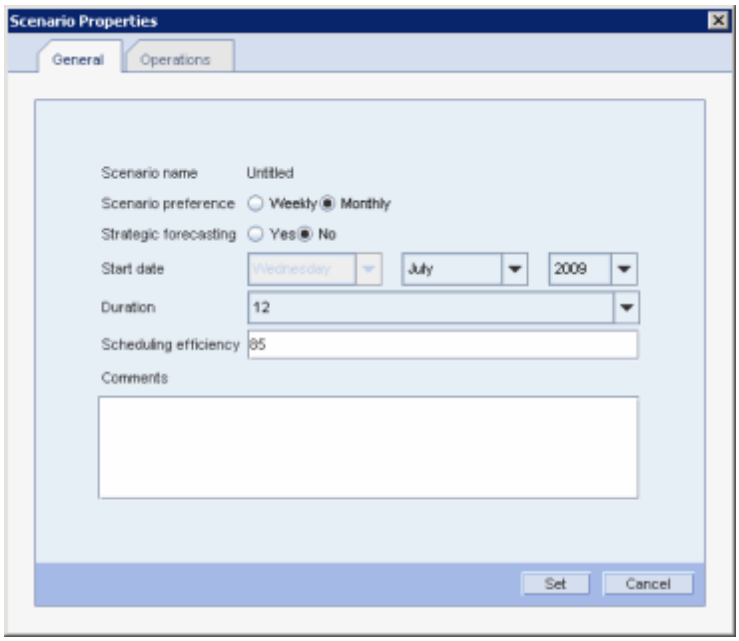
To create a new scenario from scratch:

1 Select **File..New** to create the new scenario.

The Scenario Properties window opens. This window contains basic configuration information that you need to specify before you start using your scenario. Whenever you are using Strategic Planner, you can reach this Properties window by selecting **Scenario...Properties** from the menu bar.

2 Set General properties.

In the **General** tab, select your preference for the scenario granularity (weekly or monthly), whether this is a strategic forecasting scenario, the appropriate start date and duration (number of weeks or months). A scenario must have a minimum duration of three months or three weeks, respectively, and shouldn't be longer than 52 months or 52 weeks, respectively. Scenarios longer than 12 months or weeks, respectively, may be difficult to read.



Note that the **Scenario name** is **Untitled**. The name will change when you first save the scenario to be the same as the filename you specify for saving the scenario.

Scenario preference defaults to **Monthly**. Change it to **Weekly** when creating weekly scenarios.

Strategic Forecasting defaults to **No**. Select **Yes**, if you want to use strategic forecasting to obtain long term forecasting for this scenario.

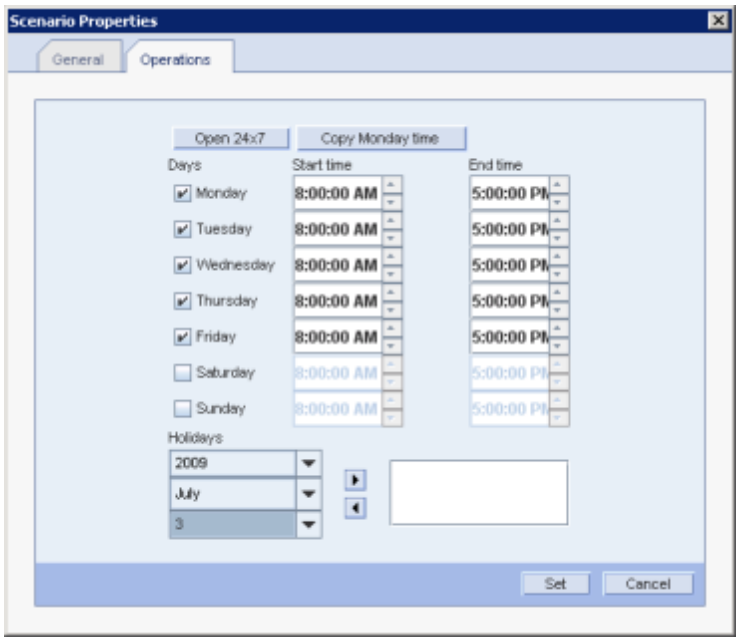
Scheduling efficiency % defaults to 85%. This factor is a measure of how well you are able to schedule your employees to serve the demand, and is also called *schedule flexibility* or *schedule inflexibility*. Scheduling efficiency is a very important number because Strategic Planner uses it to calibrate to the practices and performance of your particular call center's operations. After installation, you can calibrate scheduling efficiency by entering historical data into Strategic Planner and running its simulation system. As a general rule, the efficiency will be a number between 80% and 95%. If you use automated workforce scheduling and have a good full-time/part-time mix of employees, the efficiency can be set conservatively to 90%. If you have fixed schedules but highly variable incoming volume distributions, the efficiency can be as low as 85%.

Click the **Edit attrition by percentage** checkbox to enter attrition as a percentage of your total head count. Leave it unchecked to enter attrition as a fixed number of employees on a month-by-month basis.

The **Comments** box is a very useful place to annotate all of your assumptions as well as details concerning this scenario. For example, you may one day take your standard scenario and do a what-if analysis in which you cross-train more employees to compensate for a March spike in volume. You could note this in the comments box before saving so that you can keep track of why you created the new, modified scenario. Comments are especially useful to keep track of changes and the testing embodied by this particular scenario.

3 Set Operations properties.

Select the **Operations** tab. Set the hours of operation as appropriate.



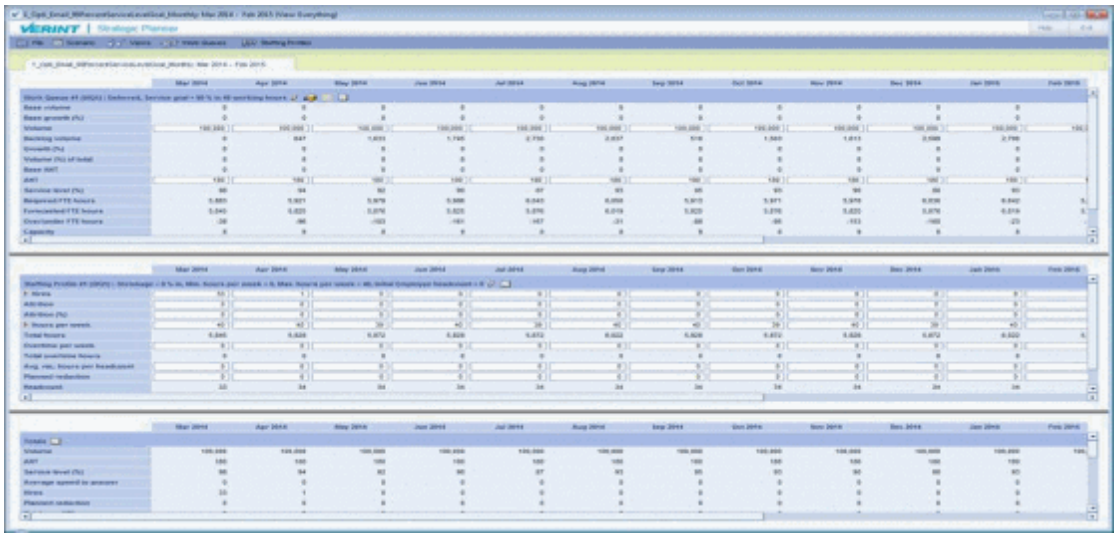
To set 24-hour operations, click **Set to 24x7**.

Click the **Copy Monday time** button to copy Monday's start and end times to the other days you have checked.

In addition, specify holidays (days when the contact center would ordinarily be open but is closed). These holidays are taken into account when Strategic Planner makes its calculations. Select the date for each holiday and click **Add**. Choose holidays that impact one or more contact center work queues. You will be able to later annotate, for each work queue and group of employees, how the holiday affects them specifically.

4 Click **Set**.

The configuration is now complete, and Strategic Planner opens its main scenario view with a new, blank scenario. This is the screen that you will use the majority of the time when you use Strategic Planner to do what-if analyses.



You can open up many different scenarios at once. Each scenario you open has a separate tab, allowing you to flip back and forth between scenarios, comparing them easily. Something you will likely do frequently is resize the main screen. Resizing the window uses standard Windows procedures. If the screen is too tall and runs off the bottom of the screen, change it by resizing the top edge of the window down, then clicking within the screen and dragging the entire window up.

Related Topics

Strategic Forecasting, page 96

Monthly Scenarios

A monthly scenario is shown in the previous screenshot.

There are two horizontal dividers that separate the window into three areas, or panes. The horizontal dividers can be dragged up and down. You will find it useful when concentrating on different activities.

The columns in a monthly scenario show:

- The various statistics
- Month columns, some of which have editable values (those showing boxes around the month's value for a particular statistic)
- Up to five summary columns to the right of the month columns (or week columns). Summaries are available for the following statistics:
  - **Total**: The total of the values displayed for each row.
  - **Max**: The highest value for that row.
  - **Min**: The lowest value for that row.
  - **Avg**: The average of the values of that row. Note the following exceptions:
    - AHT is weighted by volume
    - Service level (%) is weighted by volume
    - Growth is shown as a percentage

- **Std**: The standard deviation, calculated using the following formula: Square root of ((Sum (square of (monthly value - average))) / number of months). (For weekly scenarios, substitute weekly values in the formula.)

Weekly Scenarios

If you choose Weekly instead of Monthly when setting up scenario properties, the scenario view changes; the month column headers are replaced by those indicating weeks. The number of columns displayed here depends on the duration selected in the Scenario Properties page.

Scenario Panes

As mentioned previously, the screen is divided into three panes:

- The **Work Queues** pane
- The **Staffing Profiles** pane
- The **Totals** pane

The Work Queues Pane

The **Work Queue** pane is the top section, and is where you define and visualize your work queues.

The work queue's name, abbreviation, type (voice, email, chat), and service goal are displayed. Revenue per contact, if applicable, is also displayed. Click the queue name or the pencil icon  to open the Edit Queue dialog box. Click the database icon  to import data from Workforce Management or from a file. Click the graph icon  to display a comparison graph.

A new scenario begins with just a single work queue, called **Work Queue #1**. This work queue is, by default, an immediate work queue with a service level goal of 90% in 30 seconds. You can have tens or even hundreds of work queues in this top pane, and by scrolling, jumping, and re-ordering them, you can easily manipulate them.

The rows in the **Work Queue** pane display the following statistics. Some of the statistics may be hidden, depending on your view. You might need to use the scroll bar along the right side of the **Work Queue** pane to see all the rows, or drag the divider bar below the work queues pane down.

The remainder of the data is shown in a table format, where the columns are labeled with the month names for monthly scenarios, and with the week number and week start date for weekly scenarios. The first column shows the type of data displayed in that row, as described below:

- **Base volume** is used when data is imported from the database or from a file to provide baseline data for your scenarios.
- **Base growth (%)** shows the growth in the base volume data, imported from the Workforce Optimization Solution, as a percentage.
- **Volume** contains data that you enter. The figures in this row are the actual numbers that you expect during each of the months (or weeks) of your scenario. When the strategic forecast option is selected, the **Volume** row is not editable from the main screen. You can change the values from the Strategic Forecast main window by changing the forecast. Volume values are obtained from the strategic forecast.
- **Backlog volume** is shown for deferred work queues only, and represents volume that is not handled within the period. For example, for email work queues, when there is a large workload, the volume that is not handled within the period is carried over to the next period (that is, the next week or month depending on the scenario). The maximum backlog volume that can be carried over to the next period is N * Max. contact volume in the scenario and value of N by default is 3. This is configurable in the appProperties file.
- **Growth (%)** shows the growth of volume you entered as a percentage.
- **Volume (%) of total** is a measure of the proportion of total volume contained in each month (or week, if a weekly scenario).

- **Base AHT** is used when data is imported from the database or from a file to provide baseline data for your scenarios.
- **AHT** contains data that you enter. The figures in this row are the actual numbers that you expect during each of the months (or weeks) of your scenario. When the strategic forecast option is selected, the AHT row is not editable from the main screen. You can change the values from the Strategic Forecast main window by changing the forecast. AHT values are obtained from the strategic forecast.
- **Service Goal** where you can choose to select the **Service Level** option, which is the service level prediction that Strategic Planner makes, given the work queue statistics and the hiring and training plans. Alternatively, you can select the **Average Speed to Answer** option to simulate/optimize the average speed of answer for immediate work queues.
- **Required FTE hours** computes the total number of dedicated staff hours (after staffing efficiency) required to fulfill the service level goal.

For deferred work queues, Strategic Planner aims at reducing the backlog for the following period. The required hours in this case is calculated as follows:

(Volume + Backlog) * AHT / 3600 / Scheduling Efficiency.

- **Forecasted FTE hours** shows the number of dedicated staff hours forecasted to fulfill the service goal.
- **Over/under FTE hours** shows overstaffing and understaffing, given the hiring and training plan, and is equivalent to the forecasted FTE hours less the required FTE hours.
- **Capacity** is a useful row when conducting capacity planning. It computes the maximum number of seats required to achieve the service level goal during volume peaks, as defined by the volume forecast and predicted distribution.
- **Required FTEs** and **Over/under FTEs** show the same information as **Required FTE hours** and **Over/under FTE hours** in full-time equivalents instead of hours. FTEs are computed using the value of the field **Hours per FTE month** (or **Hours per FTE week** for a weekly scenario) entered in the **Create/Edit Work Queue** dialog box.
- **Total Revenue** shows the expected revenue, based on the volume and revenue per call (call centers) or transaction (back office operations). Only work queues that have been specified as revenue generating have this row.

You can also right click anywhere within the pane to access a pop-up menu with the following items:

- **Send to graph...**: Allows you to display a graph of data from several scenarios.
- **Copy row**: Allows you to copy the data for the selected row.
- **Paste row**: Allows you to paste previously copied data into the selected row.
- **Apply growth...**: Allows you to specify a percentage to be used as a growth factor (or compound growth factor, which is dependent on the data of the previous month or week, depending on the scenario granularity) to be applied to AHT or Contact Volume. You can specify that this growth factor is to be applied to all months (or weeks) of the scenario, a single month (or week), or a specified range of months (or weeks) in the scenario.

Depending on where you have clicked in the pane, certain menu items may not be valid. These are shown with their text in white.

Related topics

Strategic Forecasting, page 96

The Staffing Profiles Pane

The **Staffing Profiles** pane is the middle pane, and is used to define and visualize Staffing Profiles. The staffing profile's name, abbreviation, shrinkage, and agent hours per month (or hours per week) are displayed. Click the staffing profile name or the pencil icon to open the Edit Staffing Profile dialog box. Click the graph icon to display a Comparison graph.

Just as in Forecasting and Scheduling, staffing profiles are used to distinguish among groups of employees based on their particular properties, such as wage differences, shrinkage, skills, and so forth. As with the **Work Queues** pane, the **Staffing Profiles** pane can contain tens or even hundreds of staffing profiles, and you can scroll and jump between them.

The rows in the **Staffing Profiles** pane display the following statistics. Some of the statistics may be hidden, depending on your view. You might need to use the scroll bar along the right side of the **Staffing Profiles** pane to see all the rows, or drag the divider bar below the staffing profiles pane down.

- **Hires** keeps track of the number of employees the current scenario plans for hiring month by month (or week by week).
- **In training**, when applicable, tracks the number of new hires and transferees in training and therefore not effective on their work queues yet. The In training row only appears when you have specified that, for these employees, training takes more than zero weeks.
- **Transfer in** and **Transfer out**, when applicable, track the number of employees that are transferred in or out of the staffing profile.

  The **Transfer in** and **Transfer out** fields are expandable. That is, when you select the **Can transfer into this staffing profile** and/or **Can transfer out of this staffing profile** check boxes in the **Create/Edit Staffing Profile** window's **Hire/Transfer** tab and click **Set**, Strategic Planner identifies the list of profiles from which transfers are allowed and displays them under the **Transfer in** row of the profile. Similarly, a list of profiles to which transfers can be made is displayed under the **Transfer out** row. When the lists of such profiles are available, you can expand/collapse these rows and view the profiles. During optimization for transfers, the system transfers existing employees only. New hires are not transferred. Also, after an agent is transferred to a profile, the same agent cannot be transferred to a different profile and cannot be transferred back to the original profile.

  The **Transfer in** and **Transfer out** rows, when expanded, show an additional row named **Other**. This row is especially useful for migration. When an existing scenario from a previous version of Strategic Planner is opened, the values in the **Transfer in** and **Transfer out** rows from the previous version are moved to the **Other** row.

- **Attrition** keeps track of your predicted attrition on the Staffing Profile in terms of employees on a monthly (or weekly) basis. This field displays the actual number of employees as calculated from the attrition percentage. **Attrition** is interrelated with Attrition %. The system uses this information for planning.
- **Attrition (%)** is used to keep track of predicted attrition. If you enter attrition as a percentage, the actual number of your employees is calculated. Otherwise, this field displays the percentage of employees as calculated from the fixed attrition number. **Attrition (%)** is interrelated with Attrition. The system uses this information for planning.
- **Hours per week** specifies the weekly hours for each profile and for each week or month. By default, all cells in this row are equal to the minimum weekly hours specified in the profile dialog. If you open a scenario created with a prior version of Strategic Planner, the values for this row are calculated by dividing the FTE hours per 4-week period by 4.

- **Total hours** is calculated by the system; it shows the total hours per profile per period (hours per month or week multiplied by the head count). (Hours per month is calculated using hours per week and hours of operation.) The values in **Total hours** are not editable; they are updated by the system.
- **Overtime per week** is the number of weekly overtime hours for each profile and for each week or month. By default, this value is set to 0. This number is added to the total working hours for that month (or week) and the monthly (or weekly) cost is calculated accordingly. Shrinkage factors do not apply to overtime hours. If you open a weekly scenario created with a prior version of Strategic Planner, the values for this row are calculated by dividing the overtime by the head count. If you open a monthly scenario created with prior version of Strategic Planner, the value would be the weekly equivalent of the overtime divided by the head count. In both cases, the overtime hour per week is set to zero, if the head count is 0.
- **Total overtime hours** is calculated by the system; it shows the total overtime hours per profile per period (overtime hours per month or week multiplied by the head count). (Overtime hours per month is calculated using overtime hours per week and hours of operation.) The values in **Total overtime hours** are not editable; they are updated by the system.
- **Avg. vac. hours per headcount** is the average vacation hours per head count per profile for each week or month. The values in this row default to the paid vacation hours per scenario divided by the number of weeks (months) in the scenario.
- **Planned reduction** specifies the number of employees by which the head count is planned to be reduced per month or week. This field defaults to zero. This field is essentially the same as the **Attrition** field. However, there are few differences between these two fields. The system does not plan for attrition, but you can create a plan for planned reductions. Also, during the planning for planned reductions, the system removes agents only from the initial head count; it does not impact new hires in the scenario. Attrition impacts total head count.
- **Head count** computes the total head count; **Effective headcount** corrects for employees in training, transferred in or out, and laid off.
- **Shrinkage** refers to the reduction in working hours of an employee. Shrinkage can be caused by breaks, paid vacation, absenteeism, etc. Shrinkage is represented by a percentage; the number of working hours per employee is reduced by the shrinkage percentage. This row is only shown when you select to display shrinkage month-by-month (or week-by-week).
- **Occupancy** predicts the occupancy level of the employees based on the load they face on the work queues that they work.
- **Effective total hours** is calculated by the system; it shows the actual number of hours that will be worked in a week based on scheduling efficiency, Attrition, Effective headcount, and the different Staffing Profiles Pane hour fields.

You can also right click anywhere within the pane to access a pop-up menu with the following items:

- **Send to graph...**: Allows you to display a graph of data from several scenarios.
- **Copy row**: Allows you to copy the data for the selected row.
- **Paste row**: Allows you to paste previously copied data into the selected row.
- **Apply growth...**: Allows you to specify a percentage to be used as a growth factor (or compound growth factor, which is dependent on the data of the previous month (or week)) to be applied to AHT or Contact Volume. You can specify that this growth factor is to be applied to all months (or weeks) of the scenario, a single month (or week), or a specified range of months (or weeks) in the scenario.

Depending on where you have clicked in the pane, certain menu items may not be valid. These are shown with their text in white.

The Totals Pane

The bottom pane is a Totals summary, showing information such as total cost and total head count across all work queues and staffing profiles.

The rows in the Totals pane summarize the information in the two panes above. In particular:

- **Total over FTEs/Total under FTEs/Total over hours/Total under hours** help you establish the overall efficiency of your contact center. You can have the right total number of employees, but they might be distributed poorly, with certain work queues overstaffed and other work queues understaffed. In such a case the total over and total under will be large numbers, demonstrating that the resources are misallocated.
- **Volume/Head** shows the number of volumes divided by your head count.
- **Working hours** gives the total number of working hours across your center. This includes paid hours and overtime hours less vacation hours and holidays.
- **Paid hours** gives the total number of regular hours being paid, including paid vacation hours and holidays, but excluding overtime hours and unpaid holidays.
- **Paid vacation hours** gives the total number of vacation hours being paid. It is calculated by multiplying the head count by the average vacation hours and summing that for all profiles.
- **Overtime hours** shows the total overtime hours of all the profiles.
- **One-time** cost is a row where you will be able to manually specify additional costs, which are added to the cost model.
- **Cost/Volume** gives your total cost divided by the number of volumes.
- **Total revenue** is the sum of all work queues' specified revenues.

The other rows of the Totals pane are summaries of staffing profiles and work queues data.

Click the graph icon  to display a comparison graph.

You can also right click anywhere within the pane to access a pop-up menu with the following items:

- **Send to graph...**: Allows you to display a graph of data from several scenarios.
- **Copy row**: Allows you to copy the data for the selected row.
- **Paste row**: Allows you to paste previously copied data into the selected row.
- **Apply growth...**: Allows you to specify a percentage to be used as a growth factor (or compound growth factor, which is dependent on the data of the previous month (or week)) to be applied to AHT or Contact Volume. You can specify that this growth factor is to be applied to all months (or weeks) of the scenario, a single month (or week), or a specified range of months (or weeks) in the scenario.

Depending on where you have clicked in the pane, certain menu items may not be valid. These are shown with their text in white.

Summary Columns

Each of the three panes in Strategic Planning's main window can also display up to five summary columns to the right of the month columns. Summaries are available for the following statistics:

- **Total**: The total of the values displayed for each row.
- **Max**: The highest value for that row.
- **Min**: The lowest value for that row.
- **Avg**: The average of the values of that row. Note the following exceptions:
  - AHT is weighted by volume
  - Service Level is weighted by volume
  - Growth is shown as a percentage
- **Std**: The standard deviation, calculated using the following formula: Square root of ((Sum (square of (period value - average))) / number of periods).

Which summary columns are displayed depends on your view definition.

Running Simulations

In general, you specify values in the white rows in the main scenario window and Strategic Planner computes the light blue rows for you. Select **Scenario > Simulate** to run a simulation which performs the computations.

Running the simulation updates all the FTE numbers, the service level, capacity, and occupancy. Numbers that change due to calculations made during the simulation appear in red.

You can also run the simulator by pressing **Ctrl-U**.

Cost values are updated as soon as you make changes to any of the white fields.

Optimizing

Strategic Planner has an optimization tool which you can use to estimate hiring needs according to parameters that you select.

Strategic Planner considers attrition, shrinkage, and training when calculating hiring plans. Strategic Planner can try various hiring strategies for you, giving you the optimal result when it is finished running its patent-pending simulation.

To launch the optimization tool, click **Scenario > Optimize**, or use the keyboard shortcut **Ctrl+Z**.

Using Views

There are a great many lines of information shown on the Scenario screen at once. There is a special facility that allows you to view just the lines that matter most when you are undertaking a particular activity. Click the **Views** menu and note that there are pre-defined views for various activities:

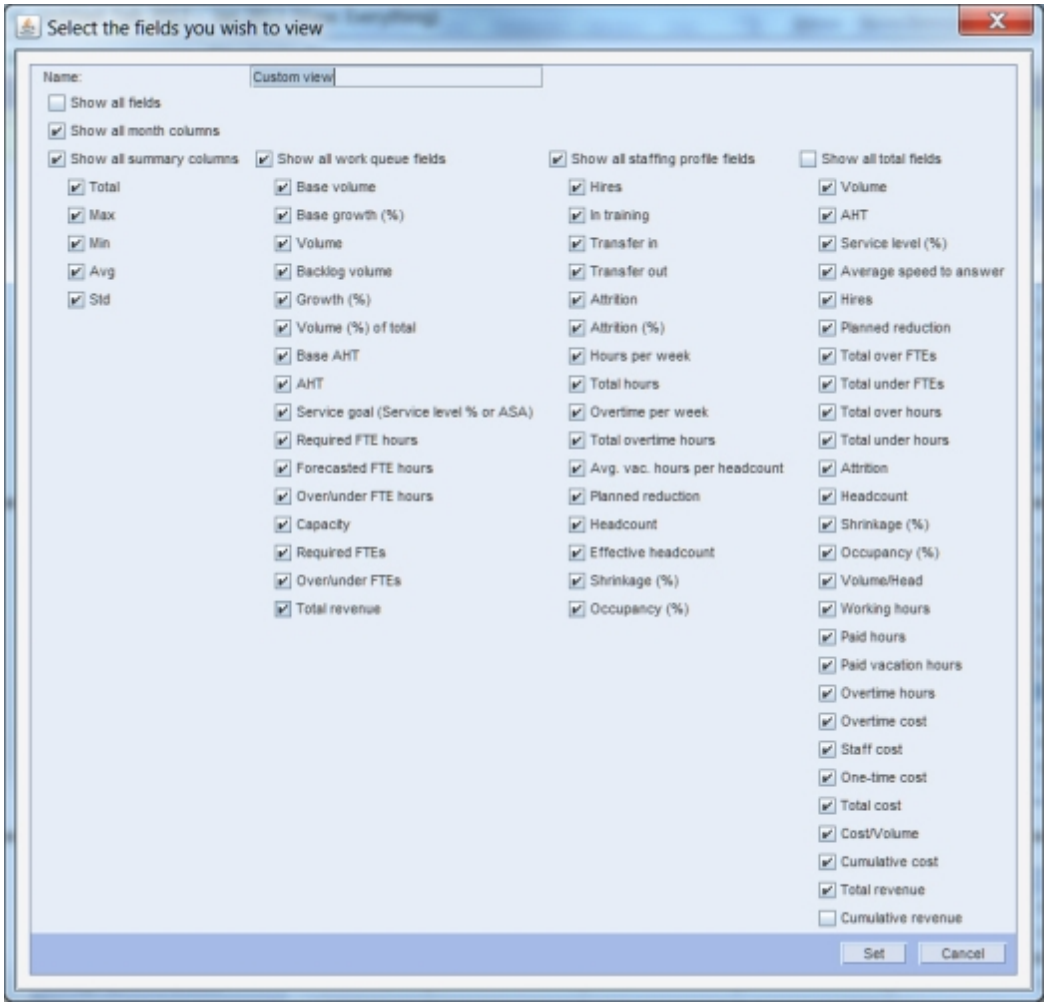
- **Everything** (every row is visible)
- **Forecasting**
- **Hiring**
- **Budgeting**

In addition to the pre-defined views, you can create a custom view.

To create a custom view

1 Select **Views..New View**.

2 Supply a name for your custom view.



3 Select the fields you want displayed in each pane.

4 Click **Set** to save your Planner Training View. This view is now saved and can be applied at any time by selecting **Views..Select custom..Planner Training**.

Views are created and saved on individual computers only. This means that a view that you created on your desktop will not be available if you send that scenario to a coworker and open the scenario on the coworker's desktop.

One additional option is available on the **Views** menu: The **Preferences** option allows you to specify whether AHT should be shown in seconds (unchecked) or hh:mm:ss format (checked).

Comparing Scenarios and Data

Strategic Planning allows you to compare scenarios as well as individual data.

Comparing Scenarios

Strategic Planning allows many different scenarios to be open simultaneously. Each scenario you open during a session has its own, separate tab, allowing you to flip back and forth between scenarios, comparing them easily.

When performing what-if scenarios and wish to compare a before/after change, first save the scenario as an .ltp file (used for saving Strategic Plannerscenarios). Then, open that scenario again (you now have two showing in the tabs), and then make the change to the second scenario.

Comparing Individual Data

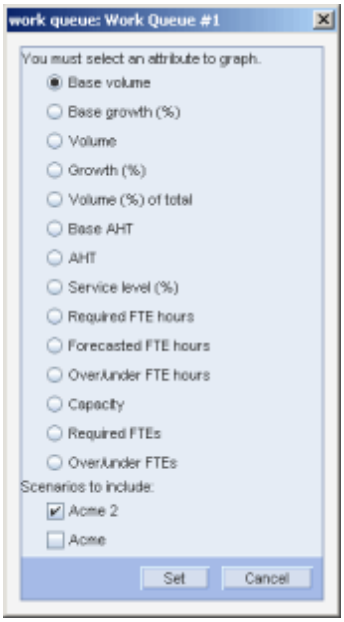
You can graph the differences between scenarios having the same granularity (weekly vs. monthly).

You cannot compare a weekly scenario and a monthly scenario using the graphing feature.

For example, you can visually graph the same row in two different scenarios that are open.

To compare, for example, Contact row statistics from two scenarios in graph format:

1 Click the **Graph** icon to the right of the work queue title.
A pop-up window is displayed, allowing you to select the statistics and scenarios to graph.



If when editing the Work Queue, you selected **Average Speed to Answer** as your **Service Goal** instead of **Service Level**, the pop-up shows the **Average Speed to Answer** attribute option instead of the **Service Level(%)** option.

2 Select a statistic and make sure both scenarios are checked.

3 Click **OK**; the graph window opens.

You can resize the window to make it more readable if needed.

You can display the statistics from any row in the scenario in graph format. When you graph rows that you ordinarily enter information on, such as the volume or AHT row, you can actually make adjustments directly in the graph, by grabbing the points and dragging them with your mouse.

To print a graph, click the **Print** button in the graph window.

Exporting to an Excel Report

You must have a copy of Microsoft Excel 2000 or later installed on your system to export data for reports. You must enable Excel macros.

To generate a Microsoft Excel report from Strategic Planner:

1. Select **Scenario..Export to Excel**.
2. Specify a file destination. When you select the file name and click, Strategic Planner creates a new Microsoft Excel file, complete with active macros. This process might take several seconds, depending on the number of work queues, staffing profiles and months (or weeks). A progress bar is displayed. When the process is finished, you will be able to click around the Strategic Planner main screen again.

What the Excel Report Contains

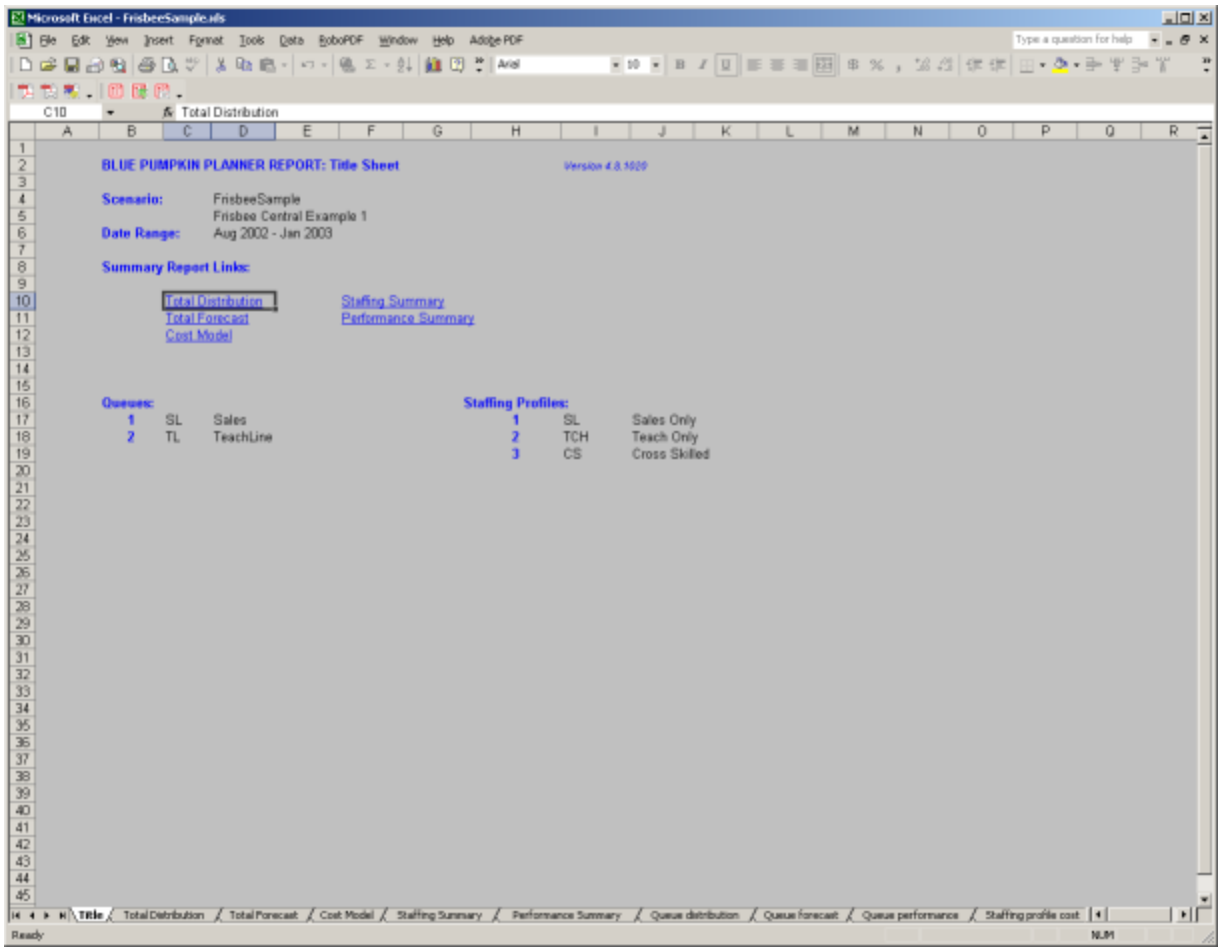
When you open an Excel report produced from Strategic Planner, be sure to enable macros when asked. The Excel report contains a number of worksheets:

- Title worksheet
- Summary worksheets
- Work queue worksheets
- Staffing profile worksheets

Title Worksheet

The left-most worksheet is the title worksheet. It lists the scenario name and date range and all work queues and staffing profiles. In addition, it contains hyper links to a set of summary reports. These reports contain statistics applied to *all* work queues and staffing profiles. Similar statistics applied to individual work queues and staffing profiles are contained in the work queue reports and staffing profile reports worksheets further to the right.

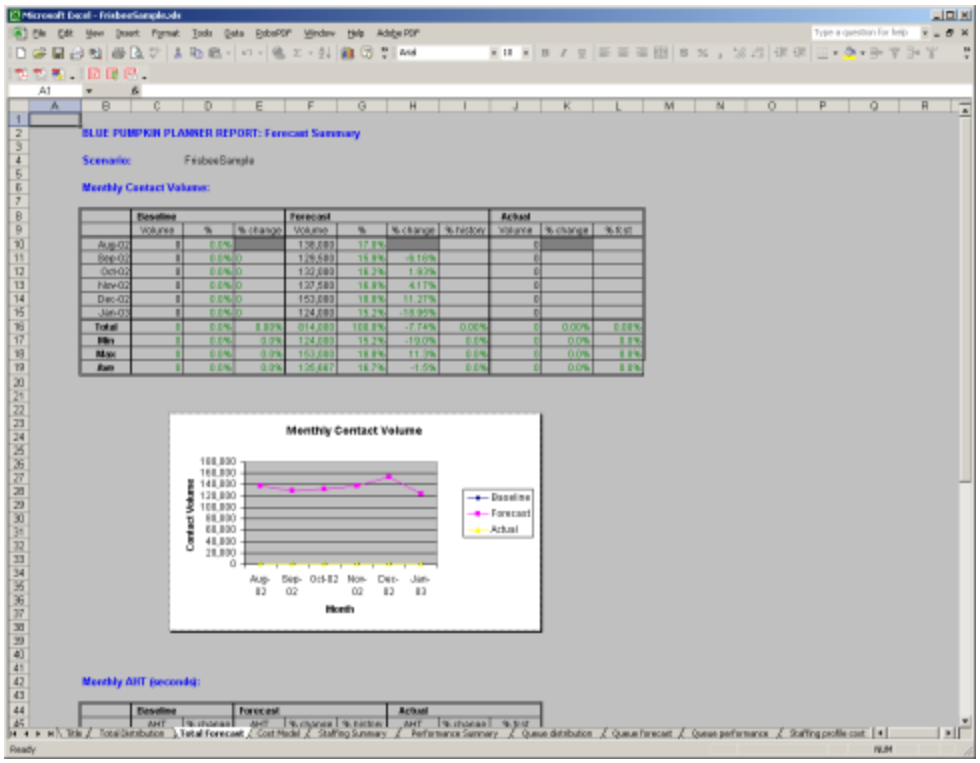
Be sure and scroll down when you view the spreadsheets. Several have multiple charts and graphs.



Summary Worksheets

There are five summary worksheets total, detailing contact statistics (**Total Distribution** and **Total Forecast**), **Cost Model**, **Staffing Summary**, and **Performance Summary**.

Click the **Total Forecast** hyper link to go the appropriate worksheet. This sheet details month-by-month (or week-by-week) total volume for all work queues put together. It has three sections, detailing **Baseline** and **Forecast** values and also containing a space for you to enter **Actual** values during the year. The **Actual** column will capture your actual data and graphically compare it to the **Forecast**. You do this by entering actual data in the work queue-specific worksheets. In general, black font indicates data imported from Strategic Planner while green data indicates data that results from computations in Excel macros.



The **Total Distribution** summary sheet works similar to this sheet, visualizing the baseline and forecast distributions and comparing actual distributions data (for the *whole* contact center) to the forecast.

The **Cost Model** sheet contains costing data directly from Strategic Planner but also computes interesting cost values, including **Cost per Volume** and **Calls per FTE**. This sheet also has two graphs that show cost efficiency and cost change over time, which are interesting visualizations of the cost date.

The **Staffing Summary** sheet contains staffing-related data, including hires, transfers (both in and out), training, attrition, planned reductions, and shrinkage.

The **Performance Summary** sheet contains data on:

- Contact statistics (volume and AHT)
- Staffing (such as required hours, required FTEs, and head count)
- Performance (such as volume per head, occupancy, and service level)

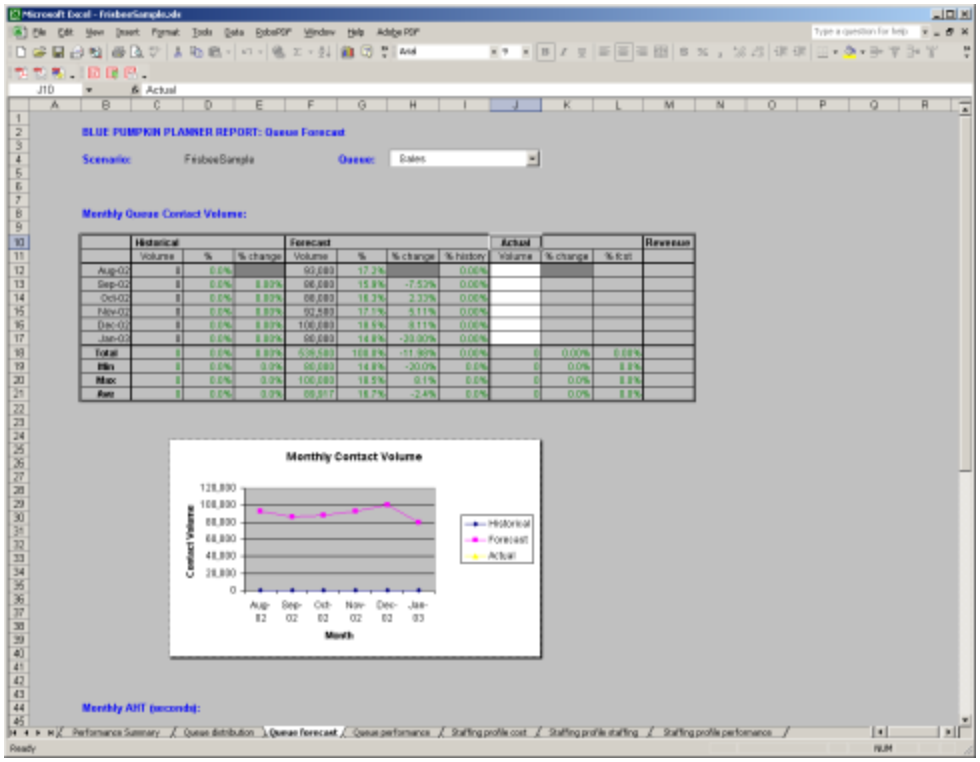
Work Queue Worksheets

There are three worksheets that show data specific to individual work queues:

- **Work Queue distribution**
- **Work Queue forecast**
- **Work Queue performance**

These are identical to their respective summary sheets, except that a pull-down control at the top of the worksheet allows you to select any one work queue for display. If you change values within the sheet in the **Actual** column, the graph below plots these values against the forecast automatically, and the

columns to the right automatically show the % difference between these values and the forecast values. These values are also updated in the **Tot Forecast** sheet.

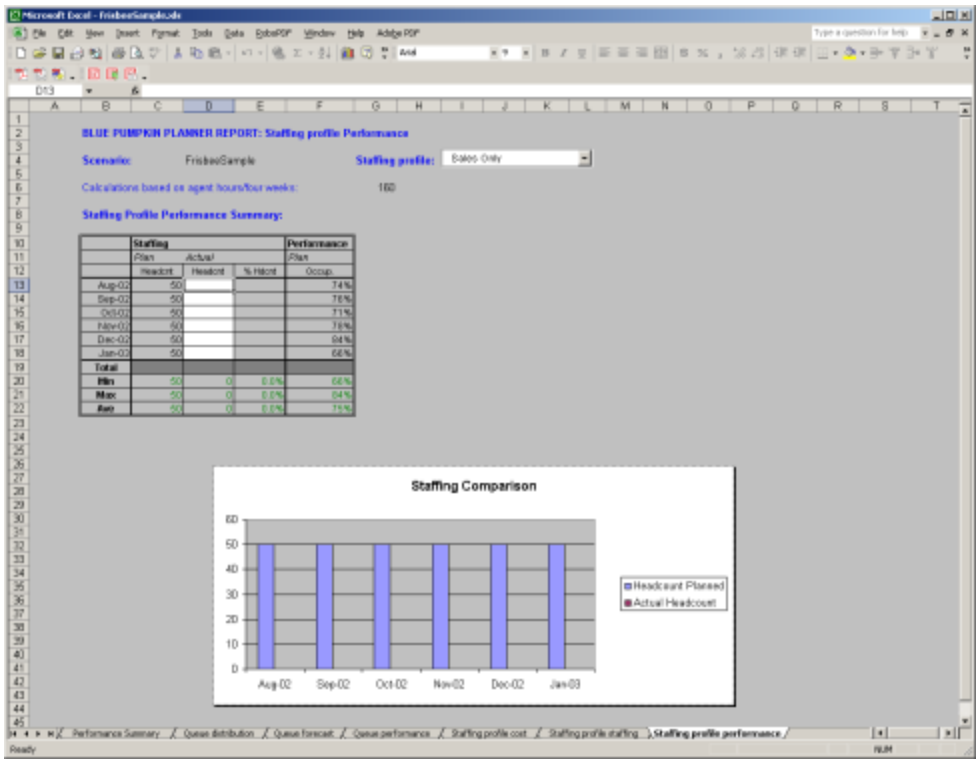


Staffing Profile Worksheets

There are three worksheets that show data specific to individual staffing profiles:

- **Staffing profile cost**
- **Staffing profile staffing**
- **Staffing profile performance**

In the **Staffing profile cost** sheet, a pull-down at the top allows you to choose any profile; the sheet then shows you cost details for that employee group. The **Staffing profile staffing** worksheet shows staffing movement specific to each profile. Finally, **Staffing profile performance** provides a place to track actual head count as compared to planned head count for each profile.



Chapter 3

Working with Work Queues

Work queues allow you to define the demands on your operation.

Topics

Editing Work Queues 36
Entering Data Manually 40
Running the Simulator 42
Importing Volume and AHT Information 43
Creating a New Work Queue 50
Adding Employees to a Work Queue 51

Editing Work Queues

By default, newly created work queues:

- Are named **Work queue #**

> If the work queue has been defined as revenue generating, the revenue per call (call centers) or unit of work (back office operations) will be included in the work queue name.

- Are voice work queues
- Have a service goal of 90% of calls answered in 30 seconds or a service goal with the average speed to answer in 30 seconds.

To edit a work queue:

1 Select **Work Queues..Edit work queues..Work Queue#1**.

You can also edit a work queue by clicking the work queue's name or by clicking the pencil icon ( ) at the right of the name.

The **Create/Edit Work Queue** window opens.

2 Specify a meaningful name and abbreviation. For the abbreviation, make sure it's short and unique.

3 Specify the **Work queue type** and **Service goal** as follows:

- If you select **Immediate (voice)**, you have the option of selecting one of two **Service goal** types:
  - Service level - if you select this goal type, you can simulate/optimize the service level percentage (percentage calls answered).
  - **Average speed to answer** - if you select this goal type, you can simulate/optimize the average speed of answer for immediate work queues.

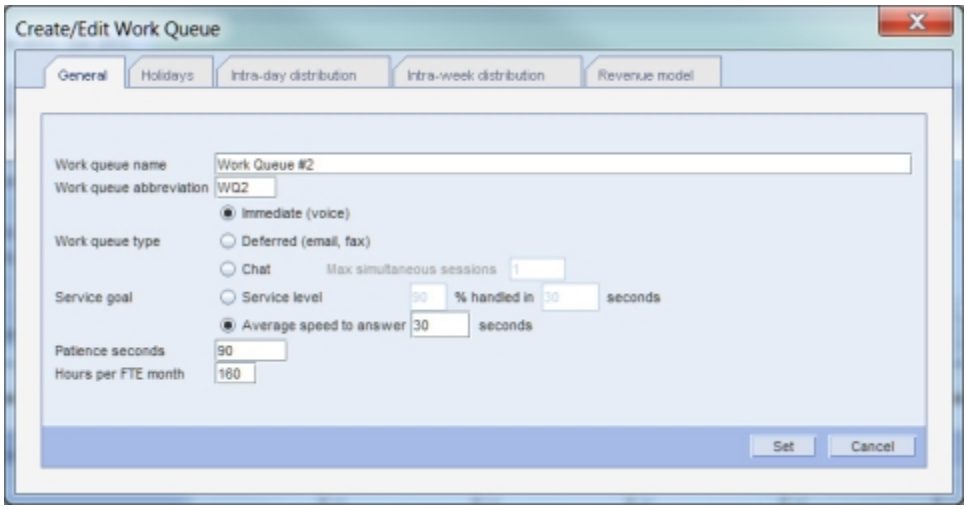
> The average speed to answer option is only enabled when the **Queue Type** is set to **Immediate (voice)**. If you select the average speed to answer option, you can set goal seconds and patience seconds.

Once you complete editing the **Create/Edit Work Queue** dialog box and close it, the Work queue tab, with its months and totals, identifies the type of service goal you set for the work queue along the top of the tab.

If you selected the **Average speed to answer** option, there is an additional row in the list of totals for which values are calculated under the Work queue tab. The row is also called **Average speed to answer**.

- Use the **Deferred** mode for all deferred work queues such as email and faxes.
- If **Chat** is selected, type the number of chat sessions you expect to handle at the same time in **Max simultaneous sessions**. Note that the service level goal is in seconds.
- If you select the **Deferred** work queue type, then the service goal is measured in hours instead of seconds.

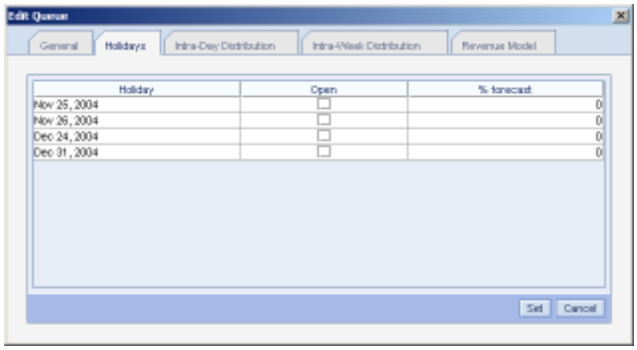
4 If you find FTEs easier to use than staff hours, use **Hours per FTE month** (or **Hours per FTE week**) to specify a divisor that will be used to translate staff hours to FTEs. Use a meaningful but simple number, such as 160.



Hours per FTE month or **Hours per FTE week** does not affect the simulation. It is only used to divide the numbers created by the simulation from staff hours into FTEs.

5 Set up holidays.

The **Holidays** tab lists the holidays entered for the scenario. If the current work queue will work during a holiday, check **Open** and enter the percentage of the work queue's normal volume you expect to get during the holiday. In other words, if you usually get 1000 calls and enter 25%, you are forecasting 250 calls for that day. (The forecast for the month (or week) remains the same; you are simply redistributing the calls for that day.)



6 Examine the distributions.

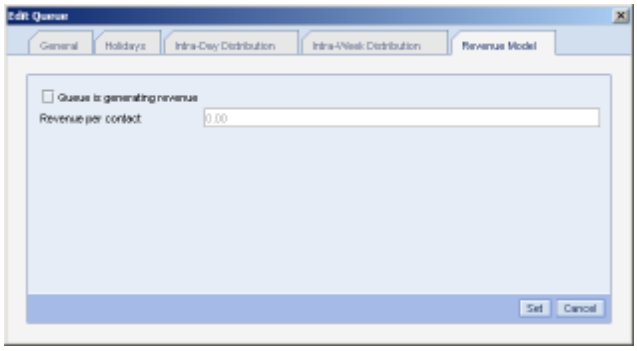
The distribution tabs graph the way the volume arrives over the course of an average day (**Intra-day**) and an average week (**Intra-week**). You can drag the data points up and down with your mouse or click a point and type a new value. The graph window resizes itself automatically to accommodate further growth. Generally, you import data from your Workforce Management database to give the appropriate shape to these distributions.

Note that the actual values are not important by themselves; their relativity to each other (the shape of the distribution) is what matters.

For immediate types of work queues (Voice, Chat) the distribution should be zero when the center is closed. For deferred work queues, this would not necessarily be the same.

Strategic Planner has the ability to allow you to designate certain work queues as ones that generate revenue if you wish. In the **Create/Edit Work Queue** dialog box, you can enter an amount that each call (for call centers) or unit of work (for back office operations) generates on average. This number is multiplied by the number of interactions forecasted to generate the total revenue number listed in the **Totals** pane on the bottom of the Strategic Planner screen. This functionality is useful in noting the difference between the costs and the revenue generated by a particular work queue.

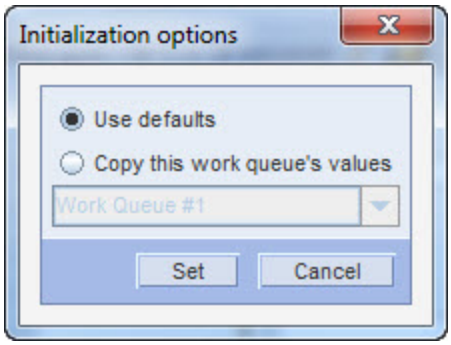
Click the check box **Work Queue is generating revenue** if it is applicable to the work queue, and input the amount of revenue per volume in the field **Revenue per contact**. The work queue revenue totals and cumulative totals are displayed in the **Totals** pane of the main window.



The **Revenue per contact** value should be an average value for the work queue, not the average revenue generated on a portion of the work queue's contacts. To compute this number, divide the total revenue generated by this work queue in a representative time period by the total number of calls offered on that work queue in that same time period.

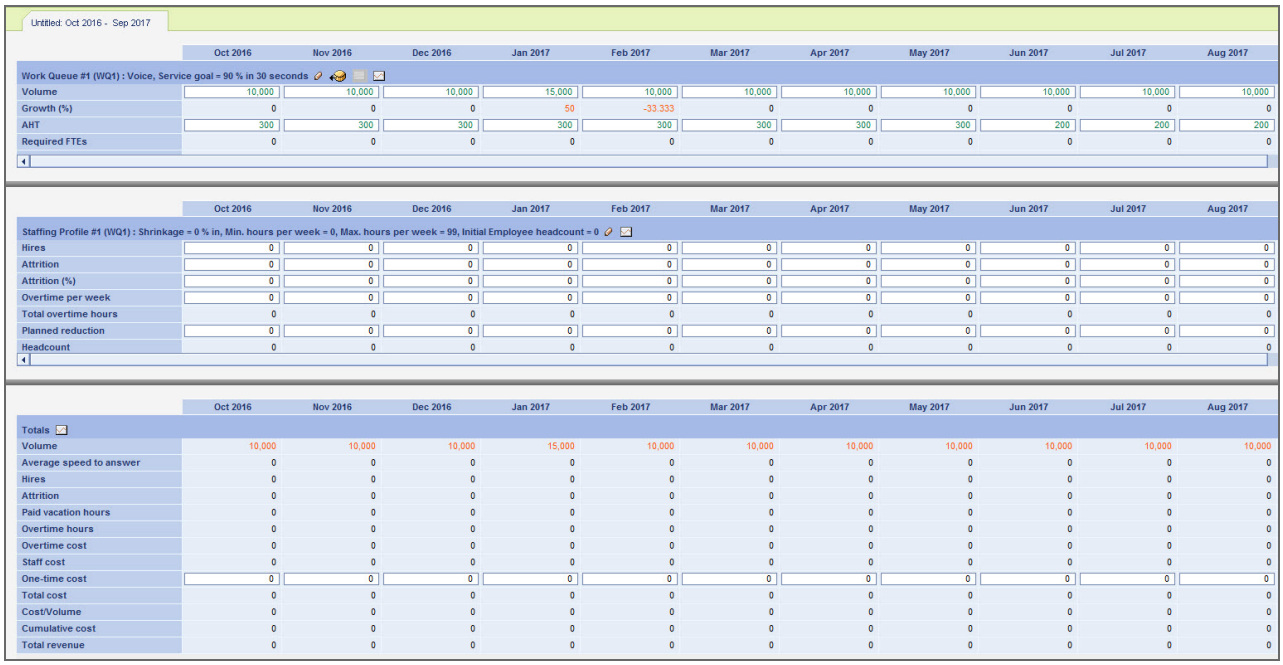
7 Click **Set** to leave the **Create/Edit Work Queue** window and save the settings.

You can create a second Work Queue by selecting **Work Queues..Create new work queue**. As a shortcut, you can copy values from an existing work queue instead of using defaults.



Entering Data Manually

Generally speaking, you can manually enter data in the fields displayed in white. For work queues, the editable statistics are **Volume** and **AHT**. Entering a value in the first field and pressing the **Tab** key results in the rest of the row being automatically filled with the same value. You can, however, make specific adjustments, but those adjustments are then copied forward into the future. For example, in the third month, if you were to change the **Volume** entry from 10,000 to 15,000, Strategic Planner copies the result into the future. You can stop that by entering 10,000 in the following month.

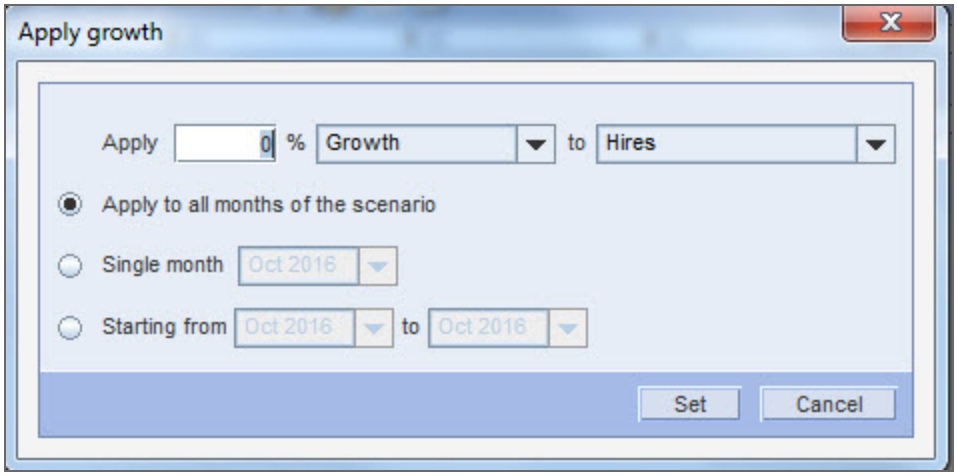


Right-click in any available row to graph, copy, or paste the row, or to set a simple or compound growth factor for the row's values.

The growth factor allows you to specify a percentage to be used as a growth factor (or compound growth factor, which is dependent on the data of the previous month or week, depending or your scenario) to be applied to AHT or Volume. You can specify that this growth factor is to be applied to all months (weeks) of the scenario, a single month (week), or a specified range of months (weeks) in the scenario

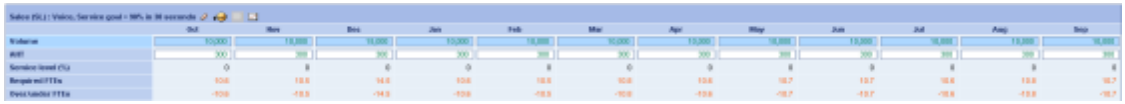
Right-click in any available row to graph, copy, or paste the row, or to set a simple or compound growth factor for the row's values.

The growth factor allows you to specify a percentage to be used as a growth factor (or compound growth factor, which is dependent on the data of the previous month or week, depending or your scenario) to be applied to AHT or Volume. You can specify that this growth factor is to be applied to all months (weeks) of the scenario, a single month (week), or a specified range of months (weeks) in the scenario.



Running the Simulator

In general, you specify values in the white rows, which are displayed in green print, and Strategic Planner computes the light blue rows for you. Select **Scenario..Simulate** and Strategic Planner will compute **Required FTEs** and **Over/under FTEs**for you. The numbers are displayed in red because they are new.



You can also run the simulator by pressing **CTRL-U**. Cost values are updated as soon as you make changes to any of the white fields.

Once the simulator is run and *there are no staffing profiles for that queue*, the forecasted ASA is set to the value set in the **Patience** field. As there are no resources to answer the calls, callers will hang up when the **Patience** value is reached (for example, after 30 seconds). The system calculates the service level (SL) with a value of zero (0), as there is no staff available to handle customer interactions.

Importing Volume and AHT Information

The Strategic Planner import tool enables you to use historical data to generate more accurate forecasts. Strategic Planner can import volume and AHT history data from Forecasting & Scheduling , or from a file. The file can be a text file (with file extension .txt) or a comma-separated values file (with file extension .csv)

The import process populates the **Base volume** and **Base AHT** rows in the Strategic Planner scenario, whether you import from a file or Workforce Management database. Importing from a Workforce Management database also populates the intra-day and intra-week distribution curves for each work queue.

The import utility allows you to select from among any work queue and any month (or week) of previous data stored in the Workforce Management database.

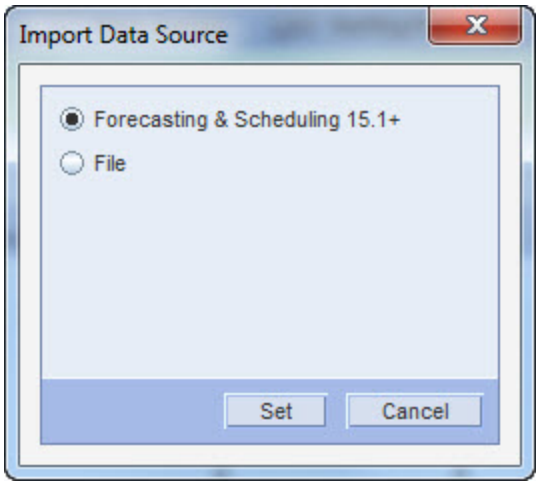
You can combine multiple ACD work queues together, and you can also combine multiple months (weeks) together. Data importing is done for both *Volumes* and *AHT* as well as *Intra-day distributions* and *Intra-week distributions*. In all cases, imported data is used to create *baseline* values that may be viewed on the main work queue grids and in distributions graphs.

The process of importing data includes:

1 **Choosing a work queue.** Volumes and distributions are all associated with each work queue in Strategic Planner. Each Strategic Planner work queue that you use may represent one ACD work queue or a group of ACD work queues. In general, to simplify the planning process, group together ACD work queues under a single Strategic Planner work queue whenever possible.

2 **Launching the import utility.** Clicking the Database Import icon  to the right of the Work Queue name begins the import operation. (Alternatively, you can use the **Work Queues...Import** or **Work Queues...Import all Work Queues** menu items.)

The first window that appears allows you to specify whether you are importing data from Forecasting and Scheduling, or from a file.



Importing From Forecasting & Scheduling

Strategic Planner uses your WFO suite credentials to connect to the WFM Forecasting & Scheduling database.

1 From the **Import Data Source** window, select **Forecasting & Scheduling** and click **Set.**

If you have not already connected to the Workforce Management database during this session, you will be prompted to enter your WFO suite username and password.

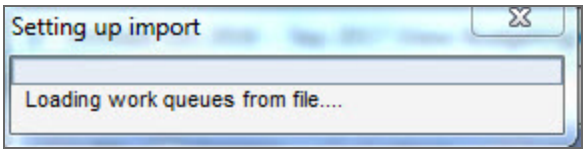
In order to import and export data into the database, you must have the following privileges:

- View Organization
- View Queues

You must also have the correct Organization and Campaign Scope along with the privileges indicated above. Otherwise, the work queues will not display in the import window.

For more information on logging in to the application server for Strategic Planner, please refer to the *Desktop Applications Deployment Reference and Installation Guide*.

The system displays the following window as it imports data:



2 Select import targets.

As shown in the next illustration, you can choose to import for **Intra-day Distribution, Intra-week Distribution**, **Volume**, and **Activity Handle Time**. The fact that you can selectively decide what to import allows you to use some work queues for their distribution data while selectively using other database work queues for their raw volumes —all for the *same* work queue in Strategic Planner.

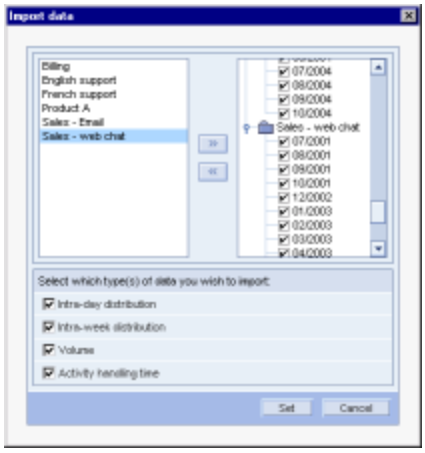
3 Select work queues.

As shown in the previous illustration, the importer allows you to combine data from as many months (or weeks) and work queues as you like. It automatically displays only those months (weeks) and work

queues that are available. For your Strategic Planner work queue, you want to select Database work queues that can together create the best forecast of future distributions and trends. For this example, pick only one or two work queues. Select the work queues, then click the  . Once you click  it takes several seconds while Strategic Planner explores the Workforce Management database to identify all valid months (weeks) of data. A progress bar is displayed.

4 Select months (or weeks for weekly scenarios).

(For strategic forecasting scenarios, daily data can be imported from the database.) In the window at the right, Strategic Planner displays all months (weeks, or days) with valid data, separately for each work queue. In general, select a representative set of months, weeks, or days. If you are importing distributions, you can import different months or weeks from different work queues. But, when you import from different work queues and the same months, weeks, or days, volumes are added together. Therefore, take care when importing **Volume** to always select the same months or weeks for all work queues. To select or un-select months, weeks, or days, just check or un-check the box next to the months, weeks, or days, as appropriate. Use the  button to remove an entire work queue from the import list.



5 Click **Set** to begin automatic calculation.

Once you click **Set**, the system takes every 15-minute unit of data and conducts significant data fusion, computing weighted averages to produce distribution data as well as average volume for each month (or week). A progress bar is displayed. This process takes time but, when complete, returns control to the Strategic Planner main screen, where you can view the resulting data.

The best way to verify successful importing is to enter **Edit Work Queue** for the target work queue and click on the distributions tabs to see the result of the data import and automatic mining process. Then return to the main screen, and note that **Base volume** and **Base AHT** contain the original, imported data, and that these values have also been copied to **Volume** and **AHT**. As you make changes here and in the distributions graphs, the baseline is always available for comparison.

Importing from a File

To import data from a file:

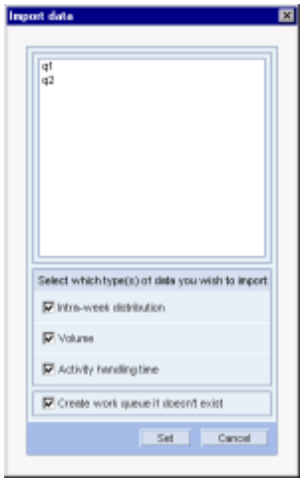
1 Select **File** and click **Set**.

A file browser window opens, allowing you to navigate to and select the .txt or .csv (comma-separated values) file you want to import.

2 Select the file and click **OK**

3 Select import targets.

As shown in the next illustration, you can choose to import for **Intra-week Distribution**, **Volume**, and **Activity Handle Time**. The fact that you can selectively decide what to import allows you to use some work queues for their distribution data while selectively using other database work queues for their raw volumes —all for the *same* work queue in Strategic Planner.

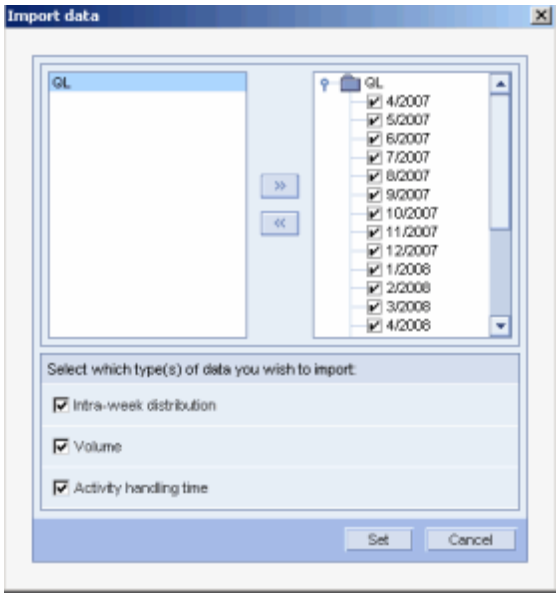


4 Select work queues.

As shown in the previous illustration, the importer allows you to combine data from as many months (or weeks) and work queues as you like. It automatically displays only those months (or weeks) and work queues that are available. For your Strategic Planner work queue, you want to select Database work queues that can together create the best forecast of future distributions and trends. Select the work queues, then click  . Once you click  it takes several seconds while Strategic Planner explores the Workforce Management database to identify all valid months (or weeks) of data. A progress bar is displayed.

5 Select months (or weeks for weekly scenarios).

(For strategic forecasting scenarios, daily data can be imported from the database.) In the window at the right, Strategic Planner displays all months (or weeks) with valid data, separately for each work queue. In general, select a representative set of months or weeks. If you are importing distributions, you can import different months (weeks, or days) from different work queues. But, when you import from different work queues and the same months (weeks, or days), volumes are added together. Therefore, take care when importing **Volume** to always select the same months, weeks, or days for all work queues. To select or un-select months, weeks, or days, just check or un-check the box next to the month, week, or day, as appropriate for your scenario. Use the  button to remove an entire work queue from the import list.



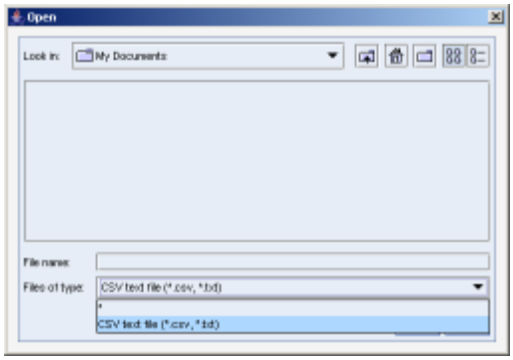
6 Click **Set** to import the data.

For file imports, the data is already summarized, and the import process only takes a few moments.

The best way to verify successful importing is to enter **Edit Work Queue** for the target work queue and click on the distributions tabs to see the result of the data import and automatic mining process. Then return to the main screen, and note that **Base volume** and **Base AHT** contain the original, imported data, and that these values have also been copied to **Volume** and **AHT**. As you make changes here and in the distributions graphs, the baseline is always available for comparison.

Format of the Import File

The file from which you import data needs to have its values separated by commas. The file extension can be either .csv or .txt.



The file must conform to the format:

```
Work queue name,M-D-YYYY,Volume,AHT
```

For example:

```
BillingQueue,1-2-2018,521,242
```

The date format MM/DD/YYYY is also supported for the import format.

Two examples are shown below, one for a single work queue, the second for multiple work queues:

Single Work Queue:

q1,09-02-2017,30000,180
q1,10-02-2017,40000,180
q1,11-02-2017,30000,180
q1,12-02-2017,40000,180
q1,01-03-2018,30000,180
q1,02-03-2018,40000,180
q1,03-03-2018,30000,180

Multiple Work Queues:

q1,09-02-2017,30000,180
q1,10-02-2017,40000,180
q1,11-02-2017,30000,180
q1,12-02-2017,40000,180
q1,01-03-2018,30000,180
q1,02-03-2018,40000,180
q1,03-03-2018,30000,180

q2,03-02-2018,3000,170
q2,04-02-2018,4000,170
q2,05-02-2018,3000,170
q2,06-02-2018,4000,170
q2,07-03-2018,3000,170
q2,08-03-2018,4000,170
q2,09-03-2018,3000,170

For intra-week distribution information, you define dates that are single days and not months. For example:

q1,09-01-2017,30000,180
q1,09-08-2017,15000,90
q1,10-02-2017,40000,180
q1,11-02-2017,30000,180
q1,12-02-2017,40000,180
q1,01-03-2018,30000,180
q1,02-03-2018,40000,180

Strategic Planner averages the volumes for each day. All Sundays in the week are averaged, then all Mondays, and so on. AHT is calculated as a weighted average of the volume.

Importing from All Work Queues

The **Work Queues..Import all Work Queues** command allows you to import to more than a single work queue. Imported work queues are assigned to existing work queues by name.

If you have not already connected to the Workforce Management database, you will be prompted to enter your WFO suite user name and password.

In order to import and export data into the database, you must have the following privileges:

- View Organization
- View Queues

You must also have the correct Organization and Campaign Scope along with the privileges indicated above. Otherwise, the work queues will not display in the import window.

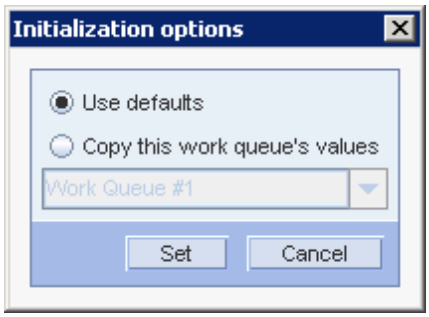
For more information on logging in to the application server for Strategic Planner, please refer to the *Desktop Applications Deployment Reference and Installation Guide*.

This feature is not available for Strategic Forecasting scenarios.

1. Select import targets. You can choose to import for **Intra-Day Distribution** (only from Workforce Management), **Intra-Week Distribution**, **Volume**, and **Activity Handle Time**.
2. Check the **Create work queue if does not already exist** box to have imported work queues that do not already exist automatically created.
3. Click **Set** to import the data. A progress bar appears.

Creating a New Work Queue

Suppose you need to assess the needs for two separate work queues. You can add a new work queue to your scenario. Select **Work Queues..Create new work queue**. The Initialization options window appears.



As a shortcut, you can copy values from an existing work queue instead of using the defaults. To do this, select Copy this work queue's values on the Initialization options window to copy the values from any other work queue in the scenario. Click Set, then specify the new work queue's name and abbreviation.

After you have created the new work queue, you can go to the **Create/Edit Work Queue** dialog box and click the **Intra-Day Distribution** tab to verify that the distribution values from the original work queue have been copied into this work queue. This is an excellent way to create new work queues that use the same distribution patterns as other work queues.

Adding Employees to a Work Queue

To add employees to a work queue:

Enter a number in the **Hires** field for a particular month (or week). This field works in the same manner as the **Volume** row; if you put a value in the hiring row, that value is replicated across all of the rows to the right. If desired, you can put a zero in the next month's column to stop this behavior.

Working with Staffing Profiles

As described previously, staffing profiles are where you define the attributes of your employee population in groups, or profiles. Staffing profiles represent your supply planning and help to determine how to develop resource plans you need to deal with the demand.

The default name for each staffing profile is **Staffing Profile #1**. The profile also:

- Answer the first voice work queue
- Considers an employee to work 160 hours per a typical four-week interval.

There are three ways in which to edit staffing profiles:

- Choose **Staffing Profiles...Edit...**[staffing profile name].
- Click the pencil icon next to the staffing profile name.
- Click the staffing profile name itself.

The **Create/Edit Staffing Profile** window shows the detail associated with a particular staffing profile.

Topics

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The Hire/Transfer Tab 56
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Setting Up Transfers for Optimization 65
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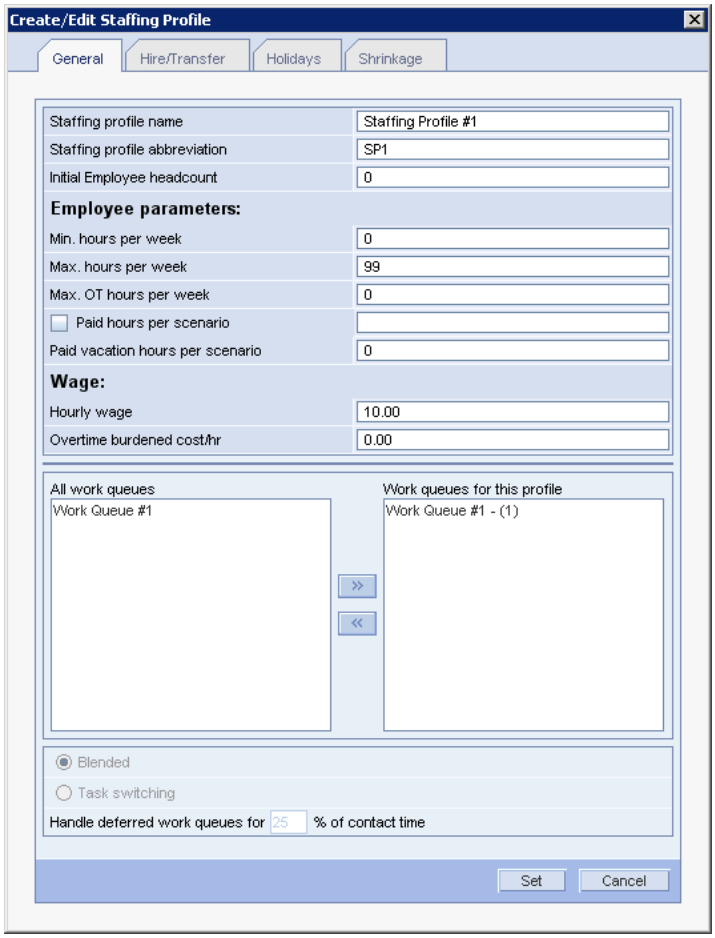
The General Tab

The General tab contains the following fields:



- **Staffing profile name**: Use a unique name.
- **Staffing profile abbreviation**: Choose something appropriate for the abbreviation. Abbreviations are used in the Excel export.
- **Initial Employee headcount**: Allows you to specify head count going into the scenario.

The following fields and controls are found in the section **Employee parameters**, and are used primarily for time-banking scenarios:

- **Min. hours per week**: The minimum number of hours a profile should work per week. This field defaults to 0.
- **Max. hours per week**: The maximum number of hours a profile should work per week. This field defaults to 99.
- **Max. OT hours per week**: The maximum number of overtime hours a profile should work per week. This field defaults to 0.

- **Paid hours per scenario**: The exact number of hours a profile should work for the entire scenario. This field defaults to 2000 if the check box next to this field is used. If it is not checked, the total scenario hours are left blank and cannot be edited.
- **Paid vacation hours per scenario**: The exact number of vacation hours a profile should have for the entire scenario. This field defaults to 0.

See Time Banking in Strategic Planner, page 92 for more information.

The field **Employee paid hours/four weeks** found in previous versions of Strategic Planner has been replaced by **Min. hours per week** and **Max. hours per week**. If you are migrating a scenario created in previous versions, the value previously set for **Employee paid hours/four weeks** divided by four is set as the value for both **Min. hours per week** and **Max. hours per week**.

The following fields and controls are found in the section **Wage**:

- **Hourly wage**: Important for costing purposes. This value is specified individually for each staffing profile, which allows more accurate costing. The wage should be unburdened wage, since there is a separate cost page where you will be able to compute both shrinkage and, later, burden or overhead.
- **Overtime burdened cost/hr**: Use this field to enter overtime plans into Strategic Planner. Enter the fully burdened cost of each overtime hour of work for this staffing profile. Note that, unlike Hourly Wage, this field is burdened (because the overhead on overtime can vary dramatically from regular hours' overhead).

An important quality of Strategic Planner is that it can handle both multi-skilled and multi-media scenarios. The lower region of the **Create/Edit Staffing Profile** window allows you to choose which work queues are worked by employees in this staffing profile. Select work queues that the employees work by highlighting them from the list of all work queues on the left and adding them to the work queues to the right.

The number shown in parentheses in the right-hand column is the work queue's priority.

Double-click each work queue listed in the right-hand column to set the corresponding priorities for the work queues.

Priorities determine how contacts are routed to your staffing profiles. A lower number implies a higher priority; for example, a work queue with priority 1 is higher priority than a work queue with priority 5:

- If no priorities are set (or all priorities are equal), a contact is normally routed to the next available staffing profile assigned to the contact's work queue.
- If two or more staffing profiles are available, the contact is assigned to the staffing profile with the highest priority.
- If a staffing profile is available to take a contact, and contacts from more than one work queue are waiting, the contact from the staffing profile's highest priority work queue determines which contact is routed.

To set a work queue's priority:

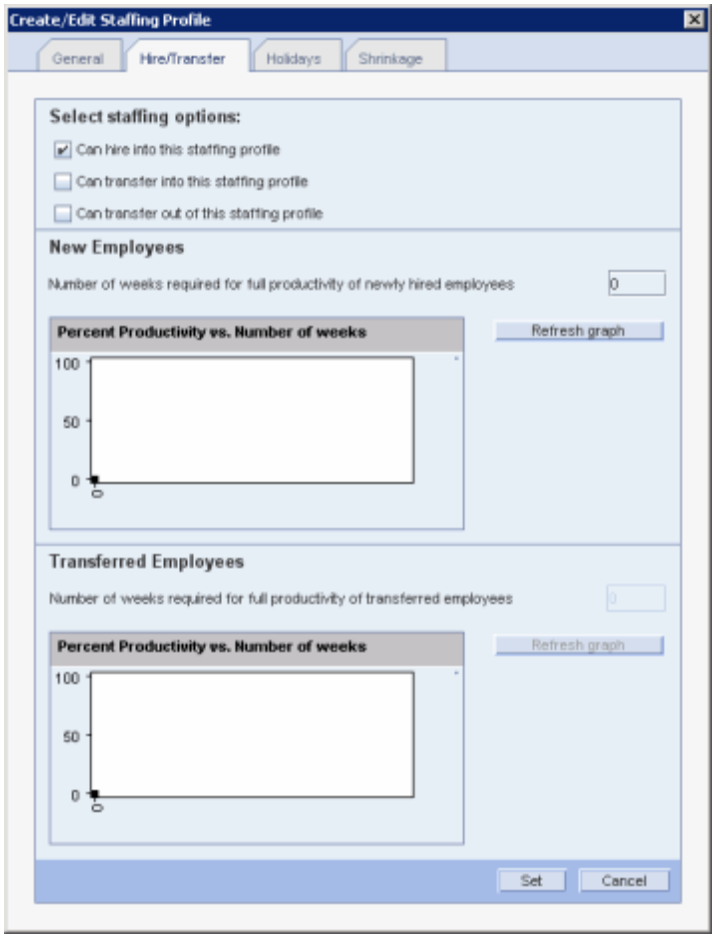
1. Double-click a work queue in the right-hand column.

   The dialog box **Enter priority for work queue** is shown.
2. Enter the desired priority for that work queue.
3. Click **Set**. (Click **Cancel** to cancel the priority values you entered.)

Note that there is a selector, **Task switching**, below **Blended** near the bottom of the window. In case you have employees working both immediate (voice) and deferred (email) work queues, this selection becomes active, allowing you to choose between blended mode, in which the employees handle both types of work queues at all times, and task switching mode, in which case the employees are allotted specific times of day to handle only the deferred work queues. In blended mode, you would typically set your immediate work queues to be higher priority than your deferred work queues, so deferred work is only performed when there are no immediate demands. In the task switching mode, you can specify, on the line below the selector, the percentage of time employees will spend on the deferred work queues. Strategic Planner can then visualize for you the quality of service impact on all work queues, letting you fine-tune your task-switching policy to maximize efficiency.

The Hire/Transfer Tab

The Hire/Transfer tab contains the following areas and fields:



The **Select staffing options** check boxes let you choose the type of hiring and transfers that this staffing profile's employees use. You have three options:

- **Can hire into this staffing profile**

  If you wish employees to be directly hired, rather than trained from existing staffing profiles, you can select the **Can hire into this staffing profile** check box and not the **Can transfer into this staffing profile** check box. Strategic Planner lets you specify how many weeks the training takes, in whole numbers. During the period of training, Strategic Planner calculates the productivity linearly over the specified number of weeks; partial productivity is calculated as a partial contribution to the FTE's pool. Note that productivity in the final week of training must finish at 100%.

- **Can transfer into this staffing profile**

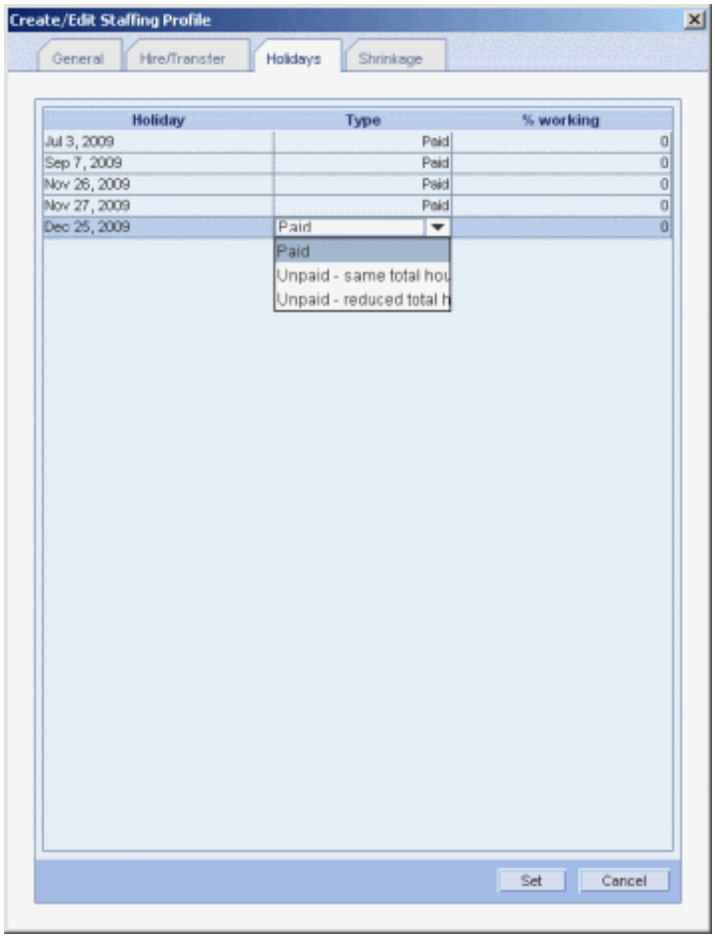
  If you select **Can transfer into this staffing profile**, you will see an additional line where you can specify the training time for existing employees who train into this staffing profile. Although not applicable to this Sales Only profile, go ahead and temporarily select **Can transfer into...** to see this line, then deselect the box.

- **Can transfer out of this staffing profile**

Select the **Can transfer out of this staffing profile** check box if employees in this profile can be further trained, and then moved to a more skilled, cross-trained staffing profile.

The Holidays Tab

The **Holidays** tab lists each holiday you set in the scenario properties.



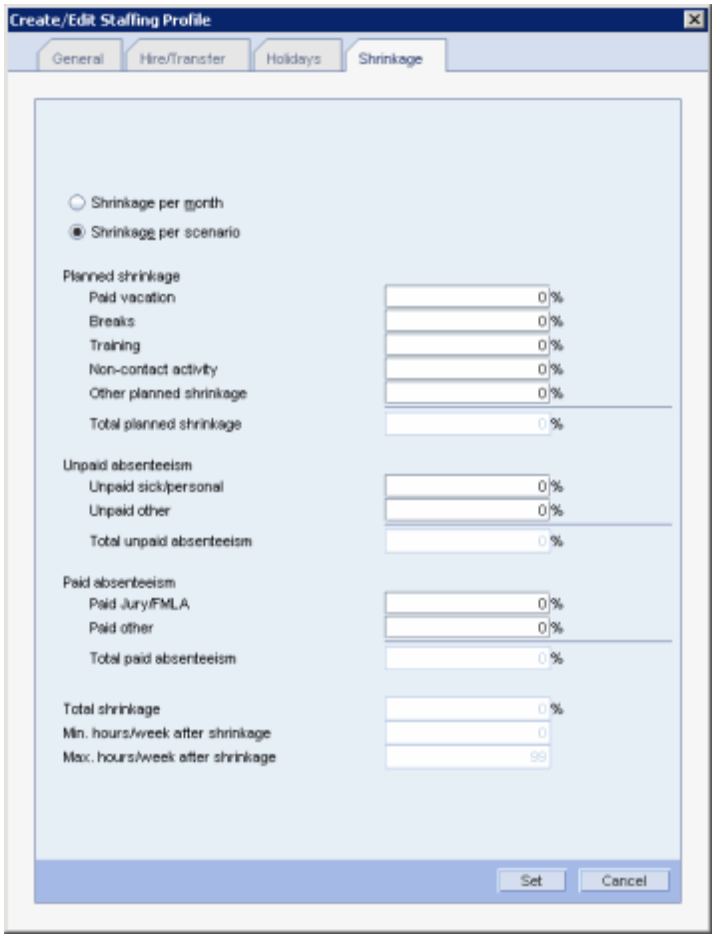
The **Type** column shows which of the three holiday types a particular holiday has:

- **Paid—**Employees receive paid time off. The total cost for the employees remains the same and the hours that they would have worked that day are counted towards their hours for the week, but those hours don't count towards staffing hours on a work queue.
- **Unpaid - same total hours—**Employees do not work that day, but the hours the employees would have worked are scheduled for another day during that week. The cost for these employees remains the same and the staffing hours for that day are reduced, although the staffing hours for the week remain the same.
- **Unpaid - reduced total hours—**Employees do not work that day and do not get paid for that day. The cost for the employees for that week is reduced by one day's pay, and the staffing hours are reduced as well.

The **% Working** column shows the percentage of people who are working that day despite the fact that it is a holiday. That percent of the people will work as they normally would have, and will get paid as they normally would.

The Shrinkage Tab

This tab is shown in the following figure:



The default setting of the **Shrinkage** tab lets you apply a single shrinkage breakdown that will be applied to all months (or weeks) of the scenario (**Shrinkage per scenario**). Otherwise, **Shrinkage per month** (or **Shrinkage per week** for weekly scenarios) creates an additional row in the **Staffing Profile** grid so that a monthly (weekly) shrinkage value can be specified manually.

Specification of appropriate shrinkage values is critical in estimating staff performance. Breaking down shrinkage allows more accurate cost estimation than is otherwise possible.

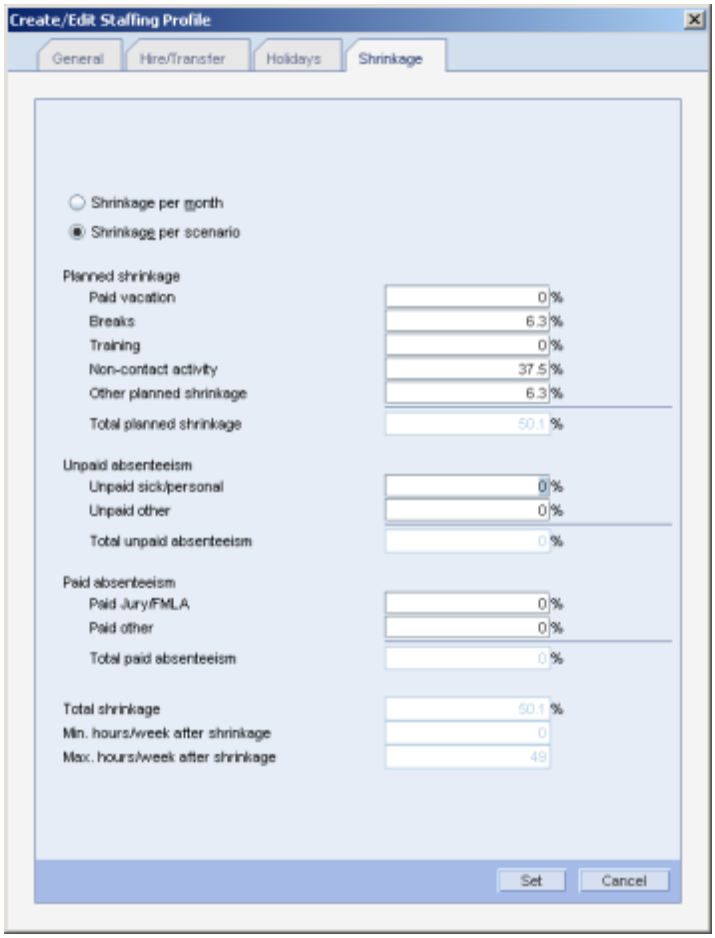
It is important to note that the shrinkage percentages entered in this window are added up to yield a total shrinkage percentage. Be sure that each percentage you enter is a shrinkage percentage of the total paid hours. When you have entered your numbers, check your work by examining **Min. hours/week after shrinkage** (the total minimum hours per week after shrinkage has been applied) and **Max. hours/week after shrinkage** (the total maximum hours per week after shrinkage has been applied)—the effective contact time your employees have, per week, taking into account all shrinkage and absenteeism. Ensure that this value is what you intend it to be.

For example, suppose that your employees are paid for 160 hours of work per 28-day month, nominally. Each day, they are given 5 hours to spend on the contact center, with other duties taking up the

remaining 3 hours. During their 5 hours on-contact, you have noted a miscellaneous shrinkage (bathroom, water fountain, etc.) of 10%. Also, the employees are given two 15-minute paid breaks during these 5 hours.

In the **Shrinkage** tab, in the **Breaks** field, you can compute the percentage of their total time in breaks. On a daily basis, this is 0.5/8 = 6.25%. Strategic Planner lets you enter percentages in one-tenth percent increments, so you would enter 6.3 in the **Breaks** field. In **Non-contact Activity** you would capture the fact that 3 hours out of every 8-hour shift is taken up with non-contact duties. So, enter 3/8 = 37.5%.

Finally, you can use the **Other Planned Shrinkage** field to capture the fact that, during their on-contact time, you have measured a 10% miscellaneous shrinkage. But this 10% is in relation to the 5 contact center hours, and therefore is not a percentage of **Employee Hours per Month**. Therefore, you have to adjust it to be a percentage of the total hours: (10%*5) / 8 = 6.25%. Therefore, in **Other Planned Shrinkage** you would enter 6.3%.



At the bottom, you can see that the Total shrinkage is now 50.1%. Below that, note that the **Max. hours/week after shrinkage** is 49. The **Min. hours per week** and **Max. hours per week** are reduced based on the specified shrinkage. The **Min. hours per week** and **Max. hours per week** are, by default, equal to 0 and 99 hours, respectively. When the 50.1% shrinkage is applied on the actual **Min. hours per week** and **Max. hours per week** (0 and 99), these values are set to 0 and 49 hours, and are shown below the **Total shrinkage** field. This means that, although we pay employees for 99 hours per week (assuming employees work **Max. hours per week**), they effectively perform contact center duties

for 49 maximum hours per week, post shrinkage. Ordinarily, of course, we would also have specified some unpaid and paid absenteeism as well, further reducing this value.

Click **Set** to return to the main window.

Entering Data Manually

You can enter data manually in the Staffing Profiles section of the main window. Generally speaking, you can manually enter data in the fields displayed in white. For staffing profiles, the editable statistics are:

- **Hires**
- **Transfer In**
- **Transfer Out**
- **Attrition**
- **Attrition (%)**
- **Hours per week**
- **Overtime per week**
- **Avg. vac. hours per headcount**
- **Planned reduction**

Entering a value in the first field and pressing the **Tab** key results in the rest of the row being automatically filled with the same value. You can, however, make specific adjustments, but those adjustments are then copied forward into the future. For example, if you were to change the **Hires** entry from 10 to 15, Strategic Plannercopies the result into the future. You can stop that by entering 10 in the following month.

Modeling Attrition

Attrition is used to model the loss of employees due to terminations and retirements. Attrition is modeled in two ways in Strategic Planner:

- One way is to enter your forecasted attrition by individual by month. You can look at your historical figures to obtain this number and then add or subtract any additional individuals as necessary.
- The other method is to enter attrition by percentage of your total head count.

If an employee becomes part of a different type of staffing profile, the **Transfer in** or **Transfer out** rows are used.

Attrition tends to vary by season (such as school year starts, after-holiday force reductions, etc.) so you have the ability to enter this attrition factor by month in your scenarios.

Creating Additional Staffing Profiles

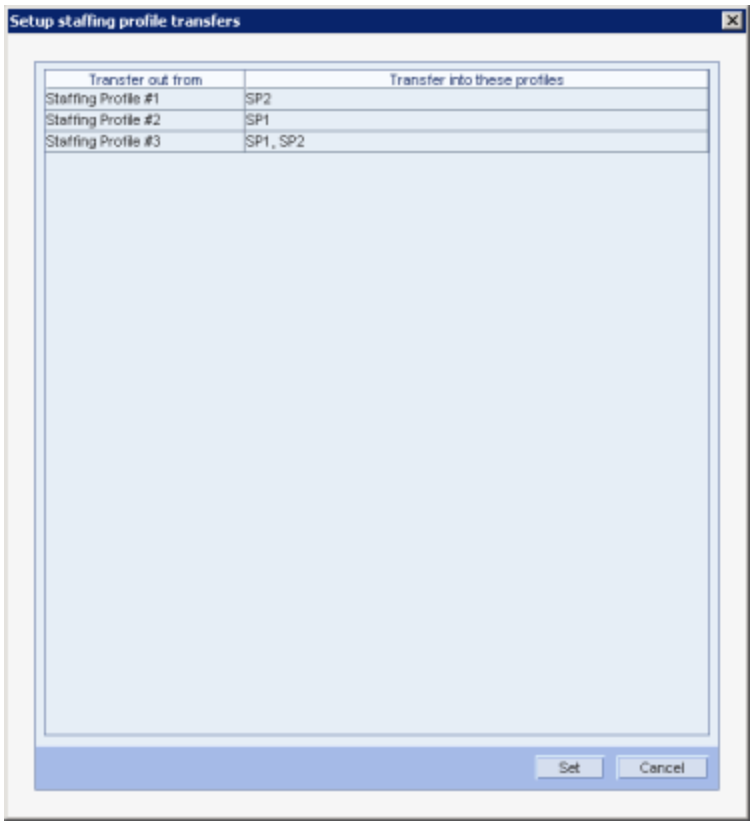
To create additional staffing profiles, select Staffing Profiles…Create new staffing profile**...**.

You can save time and avoid re-entering profile parameters (such as hourly wage, shrinkage, etc.) by selecting the Copy this Staffing Profile's values option. Select an existing profile and click Set.

The Create/Edit Staffing Profile window appears. You can then edit the new staffing profile for any differences in work queues handled, wages, transfers, etc.

Setting Up Transfers for Optimization

You can set up additional transfer options using the **Staffing Profiles...Setup staffing profile transfers** menu option. When this option is selected, transfer setup dialog is opened.



The first column shows a list of profiles from which transfers can be made. The second column lists the possible profiles to which a transfer can be made. By default, all the possible profiles to which transfer can be made are listed. When you double-click a **Transfer into these profiles** cell, a dialog opens with the possible transfer options.

You can check/deselect a selection and specify the desired profiles.
These choices are considered during optimization; the system will transfer between profiles accordingly.

Exporting/Importing Vacation Hours to Support Vacation Time Optimization

You can now export the vacation hours plan created in Strategic Planner to the Request Management module in the suite web application, or to a data file.

Similarly, you can import vacation hours data from Request Management or from a data file.

With this import/export capability, you can use optimized planning for vacation hours in Request Planning.

If you ave not already connected to the Workforce Management database, you will be prompted to enter your WFO suite user name and password.

In order to import and export data into the database, your must have the following privilege:

- View Organization

You must also have the correct Organization Scope along with the privilege indicated above.

For more information on logging in to the application server for Strategic Planner, please refer to the *Desktop Applications Deployment Reference and Installation Guide*.

This optimization takes into account such parameters as workload, forecasting, available staffing and more:

- The optimized weekly/monthly vacation hours are converted to daily vacation hours:
  - Initial vacation distribution: create Average Vacation hours distribution for each day based on the average requirements. An average requirement is obtained using the intraday demand curve and the weekly/monthly workload. Note that, if the requirement is higher, then the vacation hours would be less that day.
  - Compare each day's requirement against the average requirement and find out the % deviation of requirement from the average.
  - If a day's requirement is greater than the average requirement for that day, vacation hours are reduced for that day
  - If a day's requirement is smaller than the average requirement, vacation hours are increased for that day
  - For monthly vacation hours to daily vacation hours: the procedure is the same as for the weekly scenario. When workload is calculated, monthly workload is converted to daily workload using the following formula:

    - Volume: (Monthly Volume) * Intra week distribution[DOW] / No. of DOW in the month (DOW: Sunday, Monday etc.)

    - Workload = Volume * AHT
- Calculation for importing vacation hours:
  - Daily vacation hours are imported and their weekly/ or monthly sums are displayed to the user.
- Export vacation hours with Holidays and non-HOO:
  - Vacation hours should not be distributed on Planner Holiday days and non working day days.

Related topics

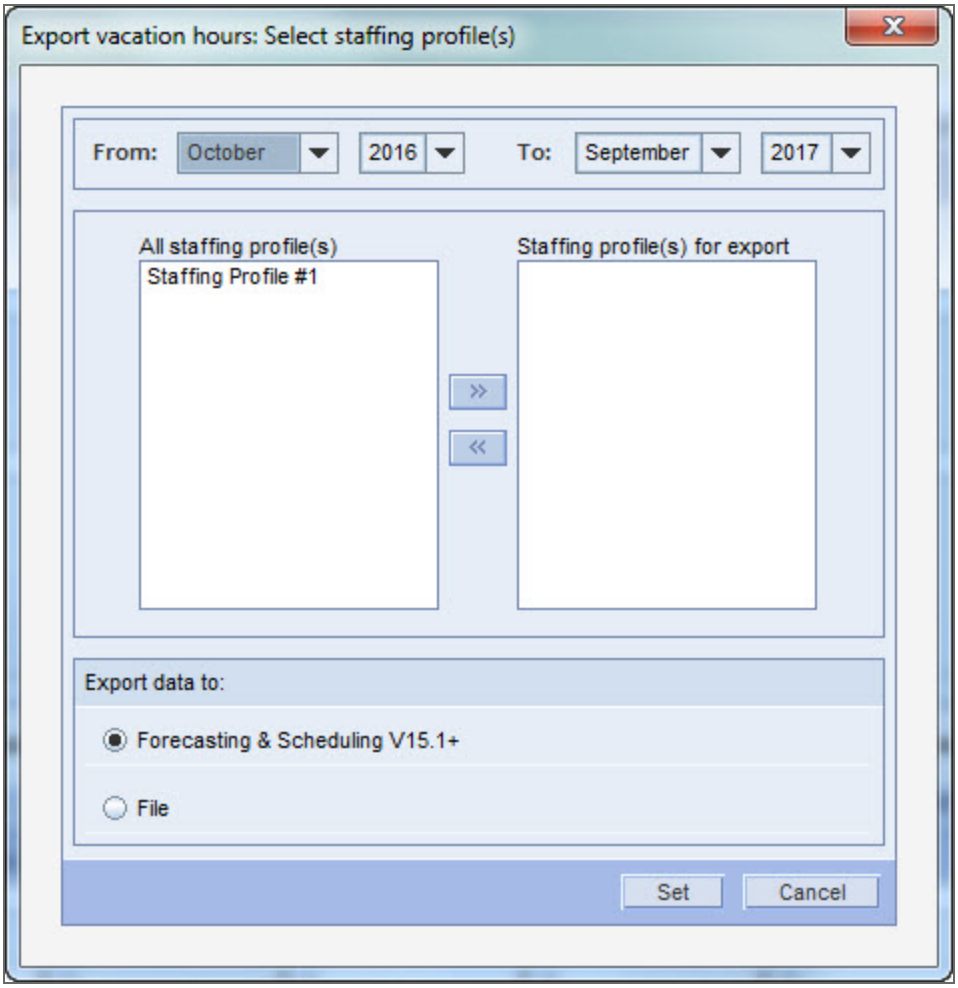
Exporting Vacation Hours, page 68

Importing Vacation Hours, page 70

Exporting Vacation Hours

1 In Strategic Planner, click **Staffing Profiles > Export vacation hours.**

The **Export vacation hours: Select staffing profile(s)** dialog box opens.



2 In the top panel of the dialog, set the beginning and end of the time interval for the vacation hours export, by selecting the appropriate months and years from the **From** and **To** date boxes.

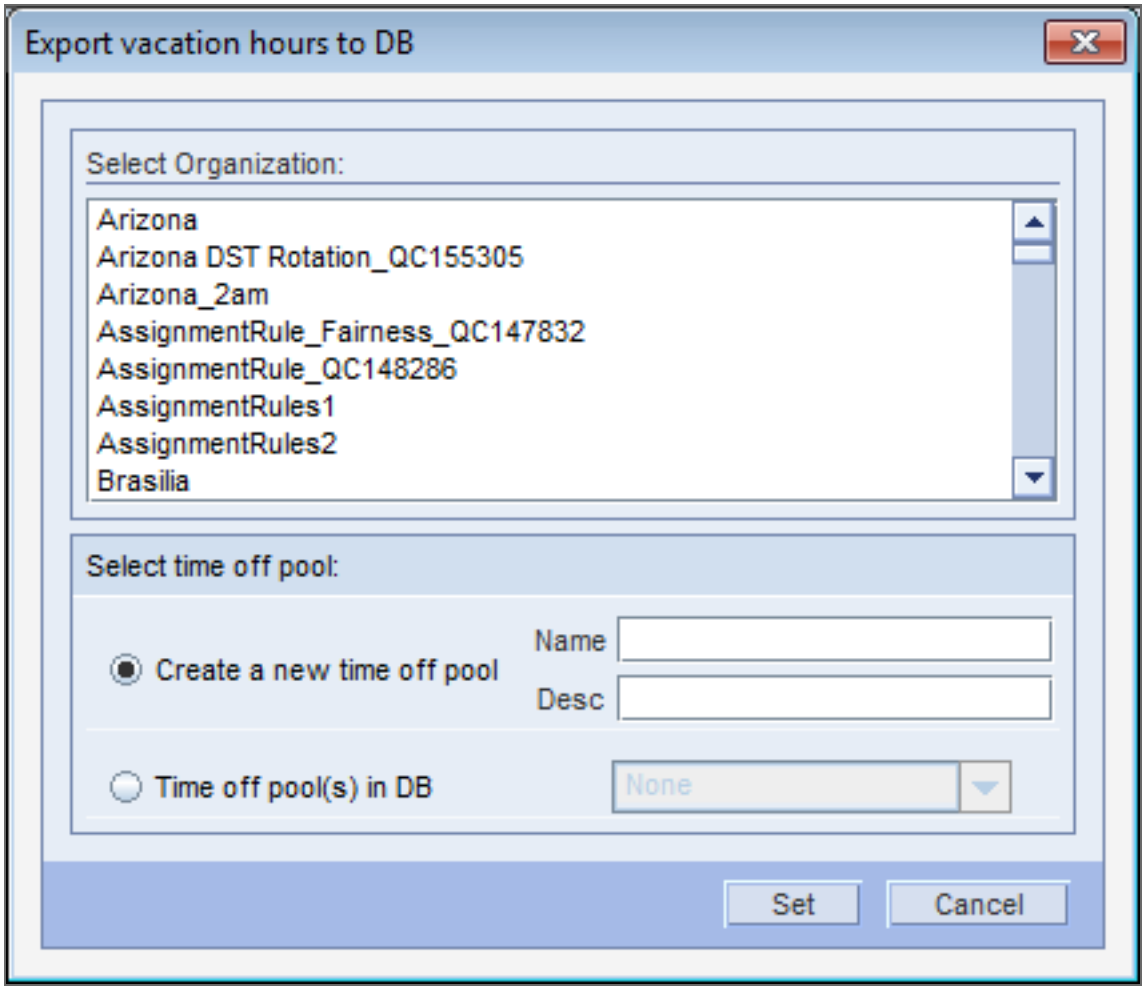
The default start and end dates are set to scenario start and end dates.

3 In the middle panel, in the **All staffing profile(s)** list, select the staffing profile(s) for which you want to export the vacation hours and click the **>>** button.

The staffing profile(s) you selected are now display in the **Staffing profile(s) for export** list.

4 In the bottom panel, click the **Forecasting & Scheduling V15.1+** radio button or the **File** radio button, then do the following:

- If you clicked **Forecasting & Scheduling V15.1+** to export the vacation hours to the Request Management module, the **Export vacation hours** dialog opens.



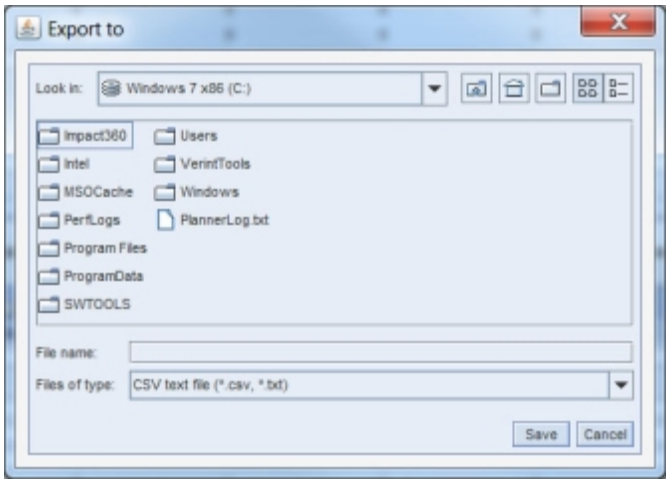
Do the following:

- From the **Select an Organization** list, select the organization to which you are exporting the vacation hours.
- In the **Select time off pool option** area, click the radio button for one of these options:
  - To create a new time off pool, click Create new Time off Pool

    For this option, type a name for the pool and a brief description (optional) in the **Name** and **Desc**. text box.
  - To update existing time off pool hours, click **Export to an existing Time Off Pool**.

    For this option, from the adjacent drop-down list box, select the time off pool for which you are updating the hours.
- Click **Set** to export the file**.**

- If you clicked the **File** radio button to export the vacation hours to a file, the **Export to** dialog box opens.



Do the following:

- Beside the **Look in** drop-down list box, click the arrow and select the main folder or drive to which you want to save the file.

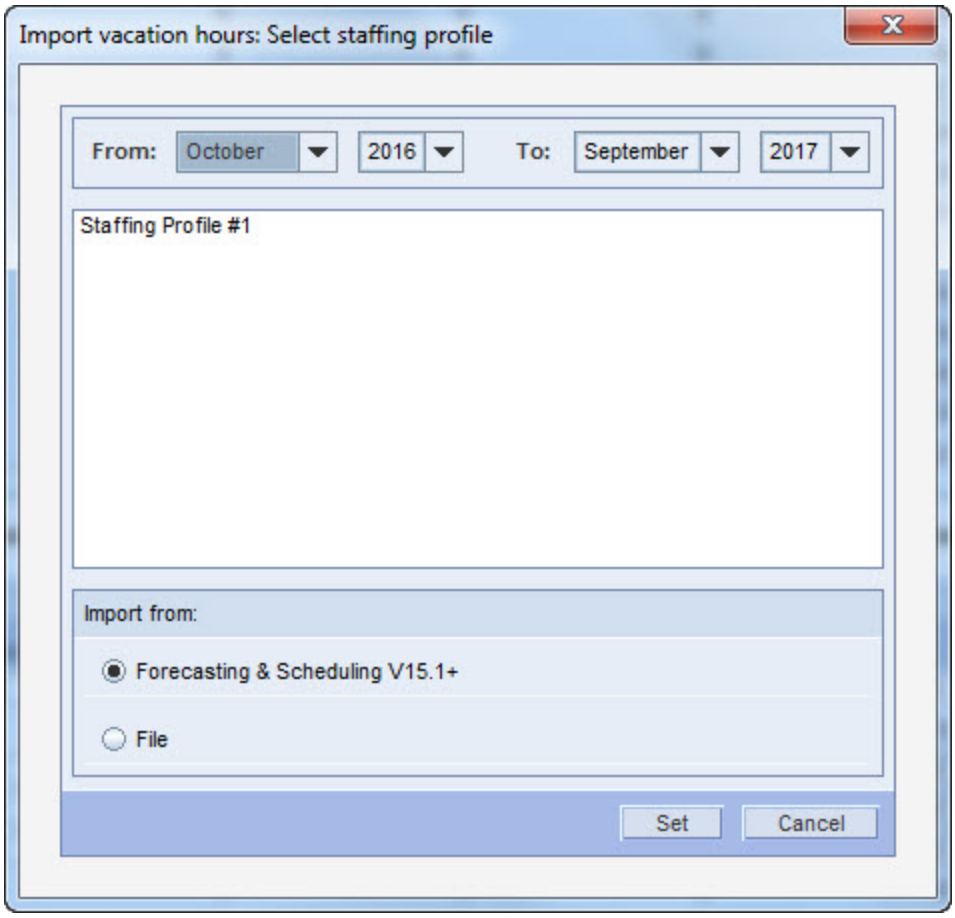
  The area below the list box refreshes with a list of sub-folders, if available. If you want to save the file to one of the sub-folders, double-click to open it.
- Beside the **File name** text box, type the name of the file.
- Click **Save** to export to file.

  A pop-up message informs you that the export was successful.

Importing Vacation Hours

1 In Strategic Planner, click **Staffing Profiles > Import vacation hours.**

The **Import vacation hours: Select staffing profile** dialog box opens.



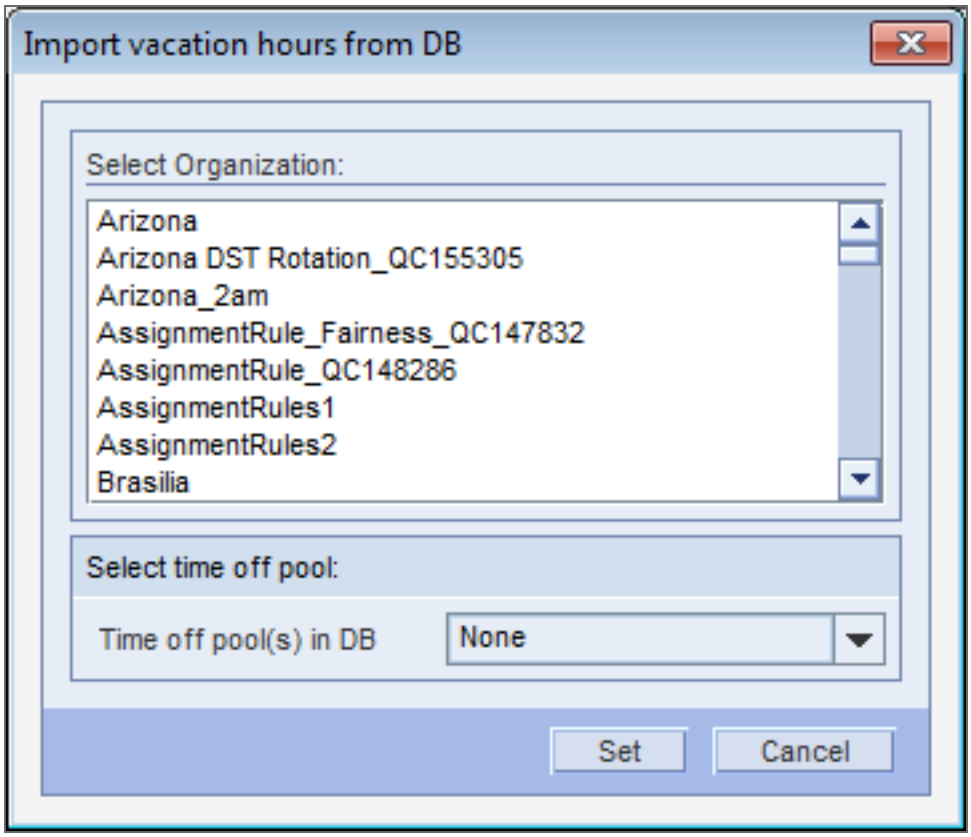
2 In the top panel of the dialog, set the beginning and end of the time interval for the vacation hours import, by selecting the appropriate months and years from the **From** and **To** date boxes.

The default start and end dates are set to scenario start and end dates.

3 In the middle panel, from the staffing profile list, select the staffing profile for which you want to import the vacation hours.

4 In the bottom panel, in the **Import from** area, click the **Forecasting & Scheduling V15.1+** radio button or the **File** radio button, then do the following:

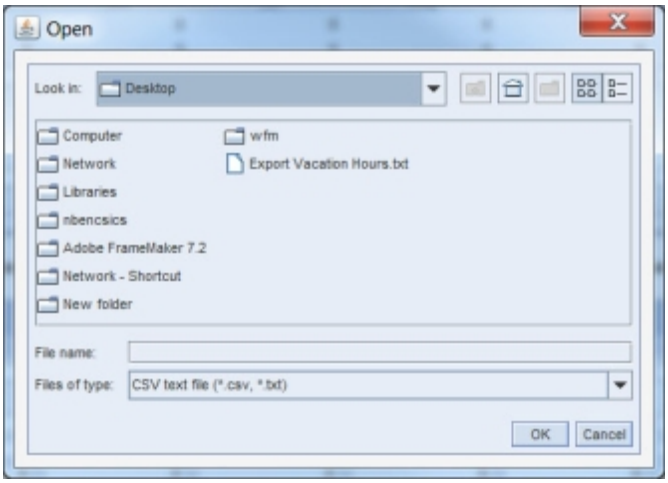
- If you clicked **Forecasting & Scheduling V15.1+** to import the vacation hours from the Request Management module, the **Import vacation hours** dialog opens.



Do the following:

- From the **Select an Organization** list, select the organization from which you are importing the vacation hours.
- In the **Import from** area, beside the **Time off Pool** drop-down list box, from the adjacent drop-down list box, select the time off pool data you are importing.
- Click **Set** to import the file**.**

- If you clicked the **File** radio button to import the vacation hours to a file, the **Open** dialog box opens.



Do the following:

- Beside the **Look in** drop-down list box, click the arrow and select the main folder or drive in which the file resides.

  If necessary, select the appropriate sub-folder where the file is located.
- Select the file to import.
- Click **OK** to import the file.

Chapter 5

Advanced Work with Scenarios

The following content covers several advanced topics in Strategic Planner.

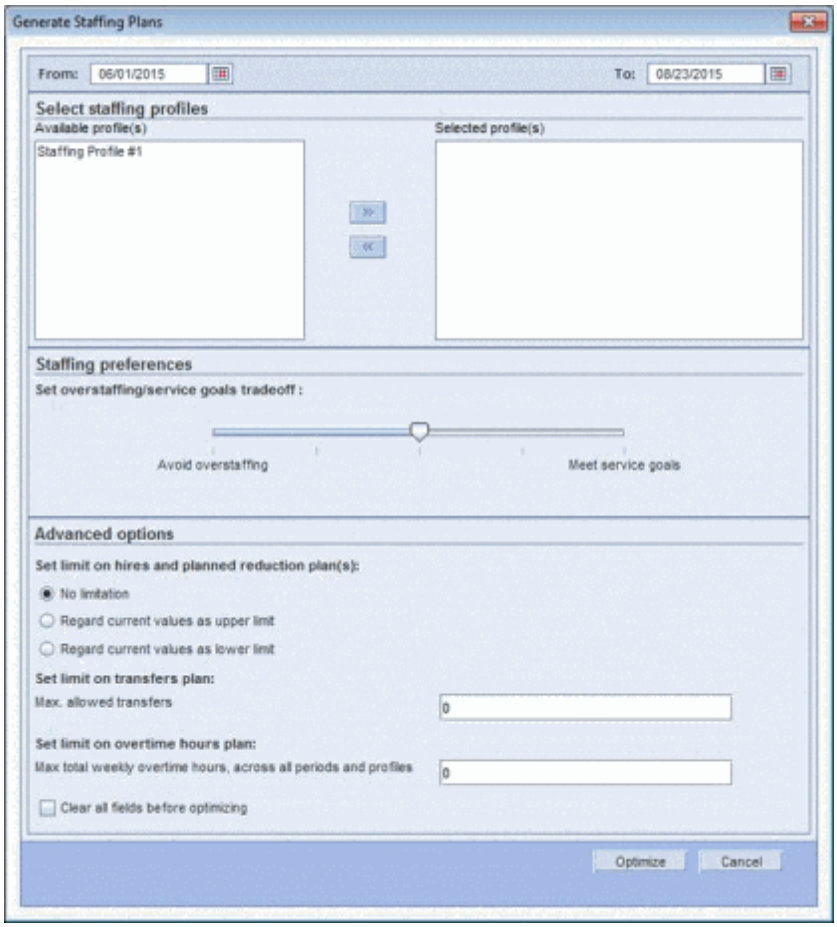
Topics

Optimizing Staffing Plans 75
Performing the Optimization 79
Cost Calculation 80
Import Data 81
Export to Excel 82
Comparison Graph 86
Running the Simulator 87
Configuring Cost Estimates 88
Time Banking 92

Optimizing Staffing Plans

Strategic Planner has an optimization tool which you can use to estimate hiring needs according to parameters that you select. Strategic Planner considers attrition, shrinkage, and training when calculating hiring plans. Strategic Planner can try various hiring strategies for you, giving you the optimal result when it is finished running its patent-pending simulation.

To launch the optimization tool, click **Scenario...Optimize**, or use the keyboard shortcut **CTRL+Z**.



At the very top of the window, on the left and right sides, date selectors allow you to start and end dates for the period to be optimized. The start and end dates of the scenario display by default. (If you set a start date later than the end date, the start date is adjusted to be the same as the end date.)

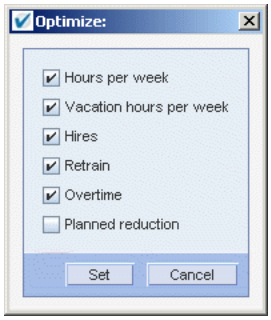
The top left list contains all profiles that can be optimized for various parameters, such as hires, hours per week, vacation hours, etc. To select a profile, highlight its name on the list and click the right-arrow button.

Another way to select a profile and plan for optimization is to is to double-click the required row (**Hires**, **Hours per week**, **Vacation hours per week**, **Planned reduction**, **Transfer** rows and/or **Overtime**

hours) in the profile's main window. If you double-click this row, a red flag appears, indicating that this row is flagged for optimization. If you double-click again, it removes the flag.

You can also double-click the row header to turn the flag on or off.

After you add a profile, it appears in the top right table, with the associated plans to be optimized listed to its right. You can double-click the profile in the top right table to open a pop-up window that allows you to select the plans to optimize.

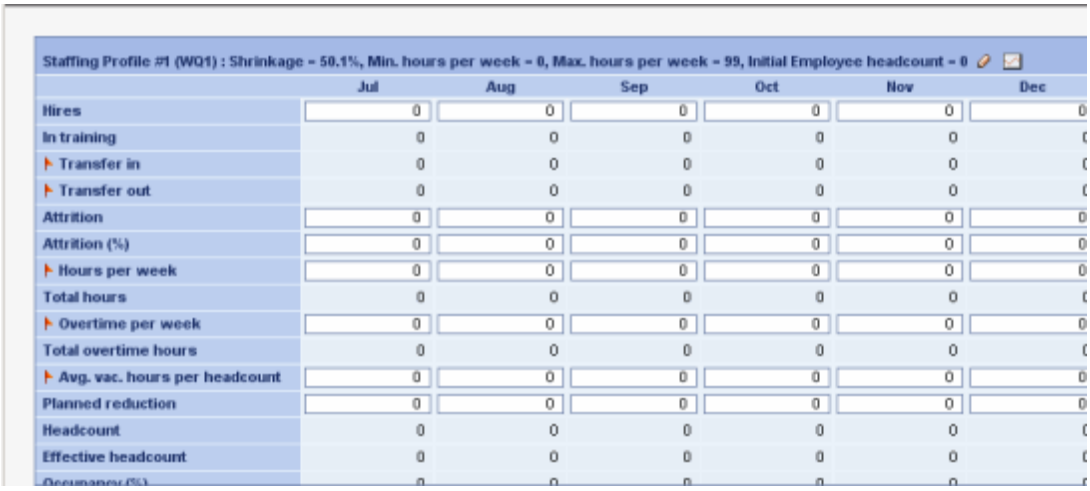


As shown in the graphic, the following plans are available:

- **Hours per week** (between min. and max., such that they add up to **Total hours**)
- **Vacation hours per week** (such that they add up to **Total hours**)
- **Hires**
- **Retrain**
- **Overtime**
- **Planned reduction**

By default, all of the above plans except for **Planned reduction** are selected.

If a plan is not selected for optimization, the values in the corresponding row remain unaffected. For example, if the **Hires** plan were not selected for optimization, the Staffing Profile section might look like the following:


Staffing Profile #1 (WQ1) : Shrinkage = 50.1%, Min. hours per week = 0, Max. hours per week = 99, Initial Employee headcount = 0

	Jul	Aug	Sep	Oct	Nov	Dec
Hires	0	0	0	0	0	0
In training	0	0	0	0	0	0
Transfer in	0	0	0	0	0	0
Transfer out	0	0	0	0	0	0
Attrition	0	0	0	0	0	0
Attrition (%)	0	0	0	0	0	0
Hours per week	0	0	0	0	0	0
Total hours	0	0	0	0	0	0
Overtime per week	0	0	0	0	0	0
Total overtime hours	0	0	0	0	0	0
Avg. vac. hours per headcount	0	0	0	0	0	0
Planned reduction	0	0	0	0	0	0
Headcount	0	0	0	0	0	0
Effective headcount	0	0	0	0	0	0

The optimizer only searches within the time window you specify on the **Generate Staffing Plans** window.

The specific priorities used for each of the plans during optimization is as follows:

1. Hours and vacation are added.
2. Overtime is then added, and higher priority items are readjusted, if needed.
3. Retraining is then added, and higher priority items are readjusted, if needed.
4. Hiring and firing are then added, and higher priority items are readjusted, if needed.

Staffing Preferences

In the middle pane, **Staffing preferences**, an option slider allows you to exercise control over overstaffing and service goal.

The slider control offers five increments, ranging from **Avoid overstaffing** to **Meet service goals**, where:

- **Avoid overstaffing** produces the best plan that keeps overstaffing below the set tolerance.
- **Meet service goals** produces the best plan to meet the service goal. This plan gives a good idea on how many employees are needed to meet your goal, and what would be the resulting overstaffing.

Use the three increments between these two extremes to refine the plans and weight both your desire to meet the goal and avoid overstaffing.

For example, when optimizing for hires, with the slider bar in the, default, middle position, the system may create a plan that under staffs some period(s) while overstaffing some other period(s) within the scenario in order to balance the staffing and service levels. If the goal is to meet the service level for all period(s), you can move the slider toward “prefer overstaffing”.

Advanced Options for Hiring, Transfers, and Overtime

The bottom portion of the window, **Advanced options**, provides access to controls over hiring, transfers, and overtime.

Setting Limits on Hiring and Planned Reductions

If you would like to limit hiring and planned reductions, input your bounds in the **Hires** row and **Planned reduction** row in the main window. Then, choose a constraint from the following options:

- **No limitation**: Your hiring plan is not considered in generating the staffing plan. Strategic Planner sets the values without any predefined limits.
- **Regard current values as upper limit**: The system will not exceed the number that is already entered for each month (or week).
- **Regard current values as lower limit**: The system will not go lower than the number that is already entered for each month (or week).

Setting Limits on Transfers

If you want to limit the number of transfers allowed in this plan, enter a number in the **Max. allowed transfers** field. This limit is applied to the entire scenario.

Setting Limits on Overtime Hours

If you want to limit the number of overtime hours employees can work in this plan, enter a number in the **Max. overtime hours** field. This limit is applied to the entire scenario.

The default value is **0**, which indicates 'No limits'.

This is the maximum Overtime per week limit applied for the entire scenario. Please note that the limit is on overtime per week value even in a monthly scenario.

Performing the Optimization

Click the **Optimize** button at the bottom of the Generate Staffing Plans window. You will see a progress bar while the system is finding the best plan for you. Once optimization is done, the new values are entered into the corresponding rows selected for optimization in for each selected profile, and the results of the simulation are shown in the main window.

It is recommended that the existing optimization results from the previous optimization run are cleared out when the same fields are optimized again. This gives the optimization a cleaner starting point. In most cases this is not necessary, but is recommended when optimizing complex cross-skilled profiles.

During optimization of the selected plans (hiring, transfers, etc.) holidays are not included. After an optimal staffing plan is created excluding holidays, simulation is performed with the holidays. So the weeks or months with holidays will have a different service level (usually lower) than other periods.

Holidays in the scenario are not included during the optimization pass. After optimization, simulation is done by taking holidays into account. That means if the service level for certain week (or month) is low due to holidays, optimizing for hires will not add more hires in the period.

During the Transfer and planned reduction optimization, an agent can be transferred or removed from a profile only one time in the scenario. This is important to understand as there could be hires and layoffs in the same period or a transfer in and transfer out in the same period.

In a complex scenario setup, if only the hiring plan is selected for optimization it is recommended to select 'Prefer over staffing' in the slider bar.

Cost Calculation

The Cost Calculation dialog opens when you select **Scenario..Cost Calculation**.

Use this dialog box to list the average wage for each staffing profile, to enter the scenario's overhead and burden costs, and to view a summary of staffing profile costs. Click OK to return to the scenario.

- **Average Non-Overtime Wage**: This tab lists the average wage for each staffing profile. This information can be edited here or in the Edit Staffing Profile dialog box.
- **Avg. Overtime Wage**: This tab lists the average overtime wage for each staffing profile. This wage should already be burdened. This information can be edited here or in the Edit Staffing Profile dialog box.
- **Burden**: This tab lets you fill in overhead/burden and other costs that are generally applicable to all agents.
- **Summary**: This tab provides several useful values for each staffing profile.
  - **Avg. Wage** is the average of the agents' wages in this staffing profile.
  - **Total Burden** is the proportion of the burden an agent carries.
  - **Pay Ratio** computes and displays the number of hours an agent is paid for each effective hour of work done by an agent. This number will always be larger than 1.0 because of absenteeism, provided that shrinkage has been defined. (Otherwise, by default, shrinkage is set to 0% and the pay ratio to 1.)
  - **Cost/Sched Hr** specifies the effective cost of each scheduled hour of work.
  - **Cost/Agent/4 Wks** computes the effective cost of four weeks for a single agent.
  - **Cost w/Overtime** computes the effective cost of four weeks for a single agent with overtime factored in.

Import Data

You can import data from the Workforce Management database or from a file for a specific queue by clicking the database icon  next to the Queue name.

Related topics

Importing Volume and AHT Information, page 43

Importing Data

1. **Select import targets**. You can choose to import for **Intra-Day Distribution** (only from Workforce Management), **Intra-Week Distribution**, **Contact Volume**, and **Average Handling Time**.
2. **Select queues**. The importer displays only the months (or weeks for weekly scenarios) and work queues that are available. Select the work queues, then click the right-facing double arrow. It takes several seconds while Strategic Planning explores the database to identify all valid months (or weeks) of data. A progress bar is displayed.
3. **Select months (or weeks)**. In the window at the right all months (or weeks) with valid data are displayed, separately for each work queue. If you are importing distributions, you can import different months (or weeks) from different work queues. If you import from different work queues and the same months (or weeks), contact volumes are added together. To select or un-select months (or weeks), check or un-check the box next to the month (or week). Use the left-facing double arrow to remove an entire work queue from the import list.
4. Click **Set** to import the data. A progress bar appears.

Importing Data from All Queues

The **Queues..Import all Queues** command allows you to import to more than a single work queue. Imported work queues are assigned to existing work queues by name.

This is not enabled when the strategic forecast option is selected.

1. **Select import targets**. You can choose to import for **Intra-Day Distribution** (only from Workforce Management), **Intra-Week Distribution**, **Contact Volume**, and **Average Handling Time**.
2. Check the **Create queue if does not already exist** box to have imported work queues that do not already exist automatically created.
3. Click **Set** to import the data. A progress bar appears.

Export to Excel

Export your scenario to a Microsoft Excel spreadsheet.

Procedure

1. Select File > Open to open the scenario to be exported.

   This scenario should contain multiple staffing profiles that allow a proper comparison when exported to Excel.
2. Select **Scenario..Export to Excel**.
3. Specify a file name and destination, and click **Save**.

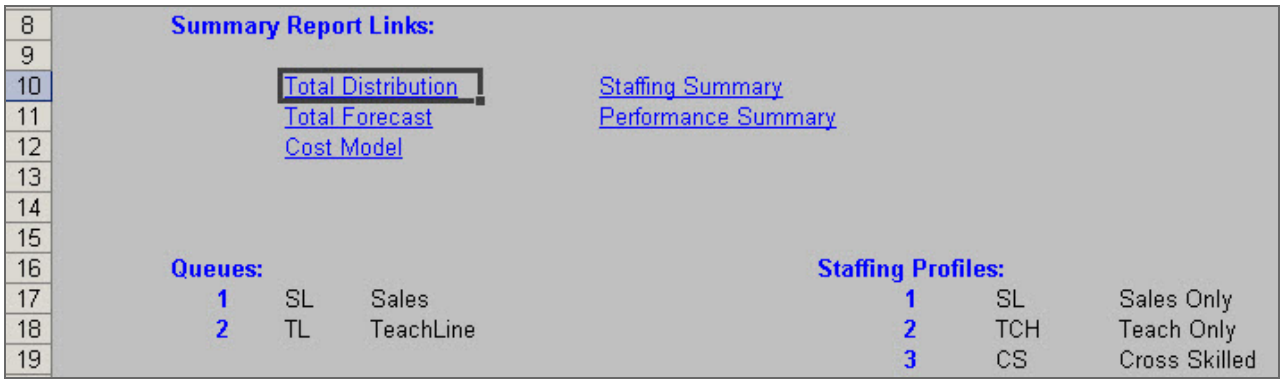
   Strategic Planning creates a new Microsoft Excel file with active macros. This process will take several seconds, depending on the number of work queues, staffing profiles, and months (or weeks). A progress bar is displayed.
4. Open the Excel report in the location you saved it in.
5. Enable the macros when prompted by Excel.

Title worksheet

The Excel file opens to the title worksheet on the far left tab of the Excel file. This worksheet contains the scenario name, date range, work queues and staffing profiles. This worksheet also contains links to a set of summary reports that provide statistics applied to all work queues and staffing profiles.

Statistics applied to individual work queues and staffing profiles are displayed in the work queue reports and staffing profile reports worksheets on tabs displayed to the right.

Scroll down when viewing the worksheets, as they may contain multiple charts and graphs.



Summary worksheets

There are five summary worksheets in the Excel file:

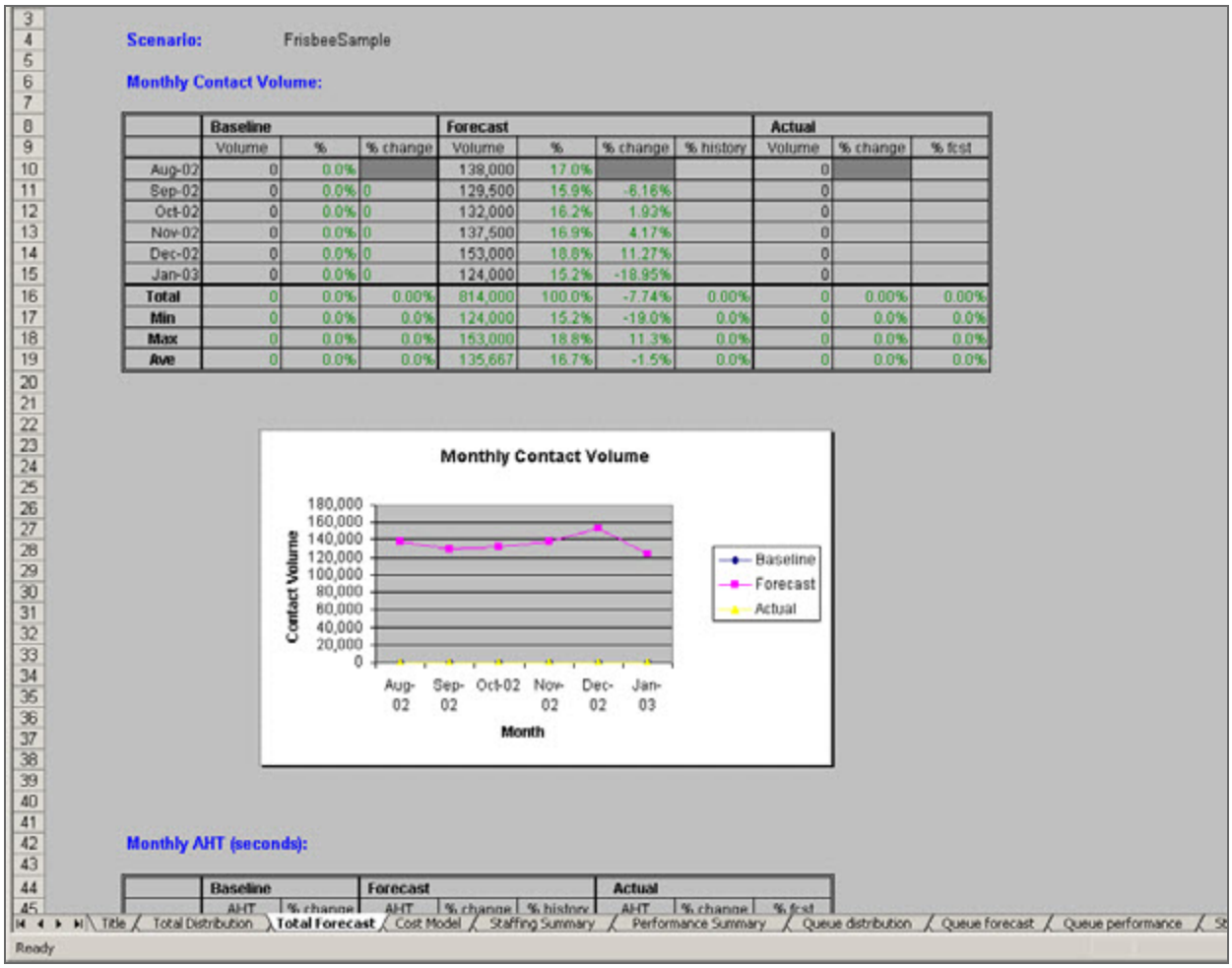
- Total Distribution
- Total Forecast
- Cost Model
- Staffing Summary
- Performance Summary

Total Distribution and Total Forecast detail contact statistics. Click on the Total Forecast hyperlink to go the appropriate worksheet. This sheet details month-by-month (or week-by-week) total volume for all work queues. It has three sections, detailing Baseline and Forecast values and also containing a space for you to enter Actual values during the year. The Actual column will capture your actual data entered in the work queue specific worksheets, and graphically compare it to the Forecast. Black font indicates data imported from Strategic Planner, while green data indicates data that results from computations in Excel macros.

The Distributions summary sheet visualizes the baseline and forecast distributions, and compares actual distributions data (for the whole contact center) to the forecast.

The Cost Model sheet contains cost data directly from Strategic Planner. This sheet also computes Cost per Volume and Calls per FTE. This sheet also has two graphs that show cost efficiency and cost change over time.

The Performance Summary and Staffing Summary worksheets contain related data and graphs.



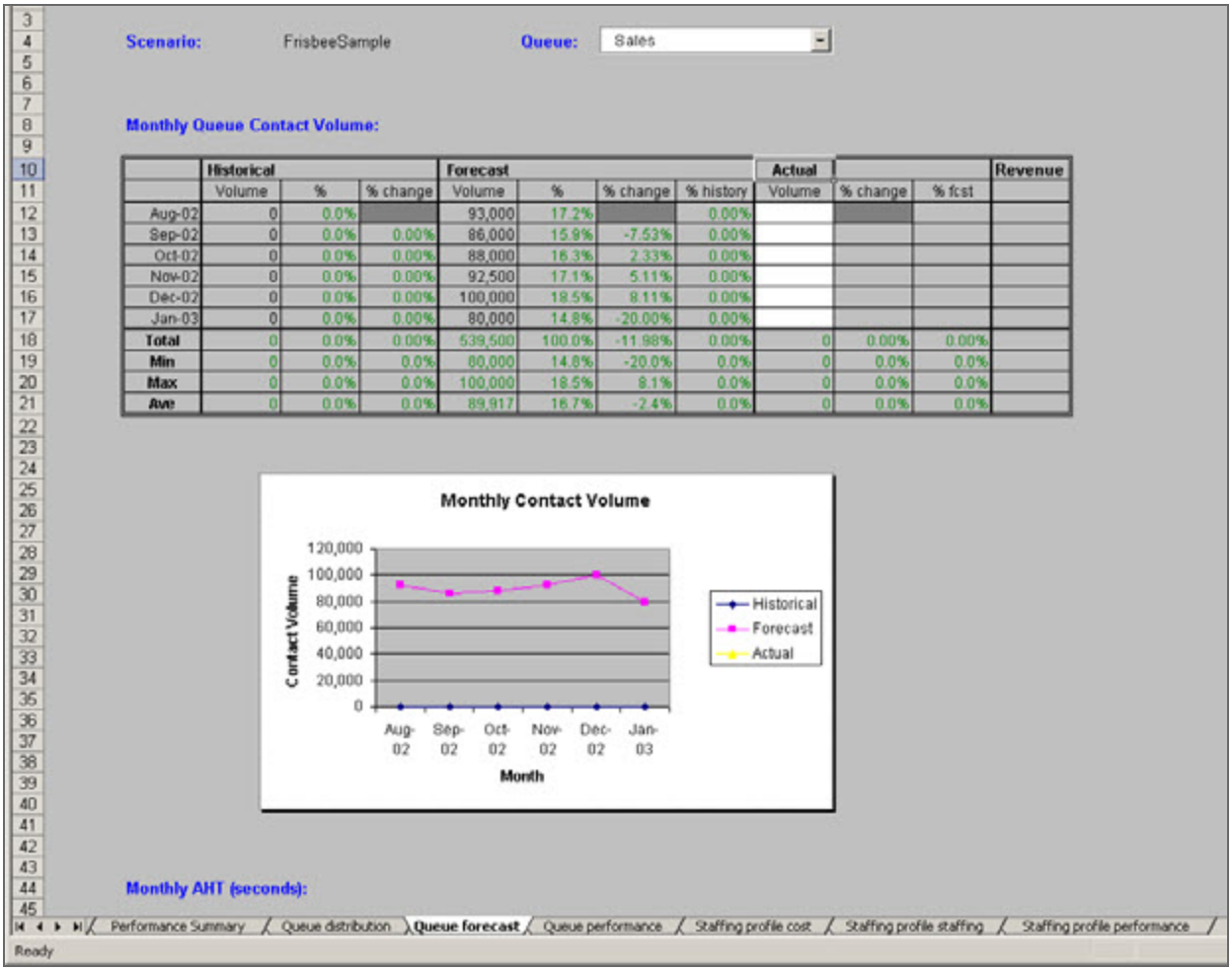
Work Queue Worksheets

There are two worksheets that show data specific to individual work queues:

- Work Queue Distribution

- Work Queue Forecast

They are identical to the summary sheet, with the exception of a drop-down list at the top of the worksheet which allows you to select any work queue for display. The sheet will shows forecast data specific to the selected work queue. When numbers are entered in the Actual column, the graph below plots these values against the forecast. The columns to the right automatically show the percentage difference between the actual values and the forecast values.

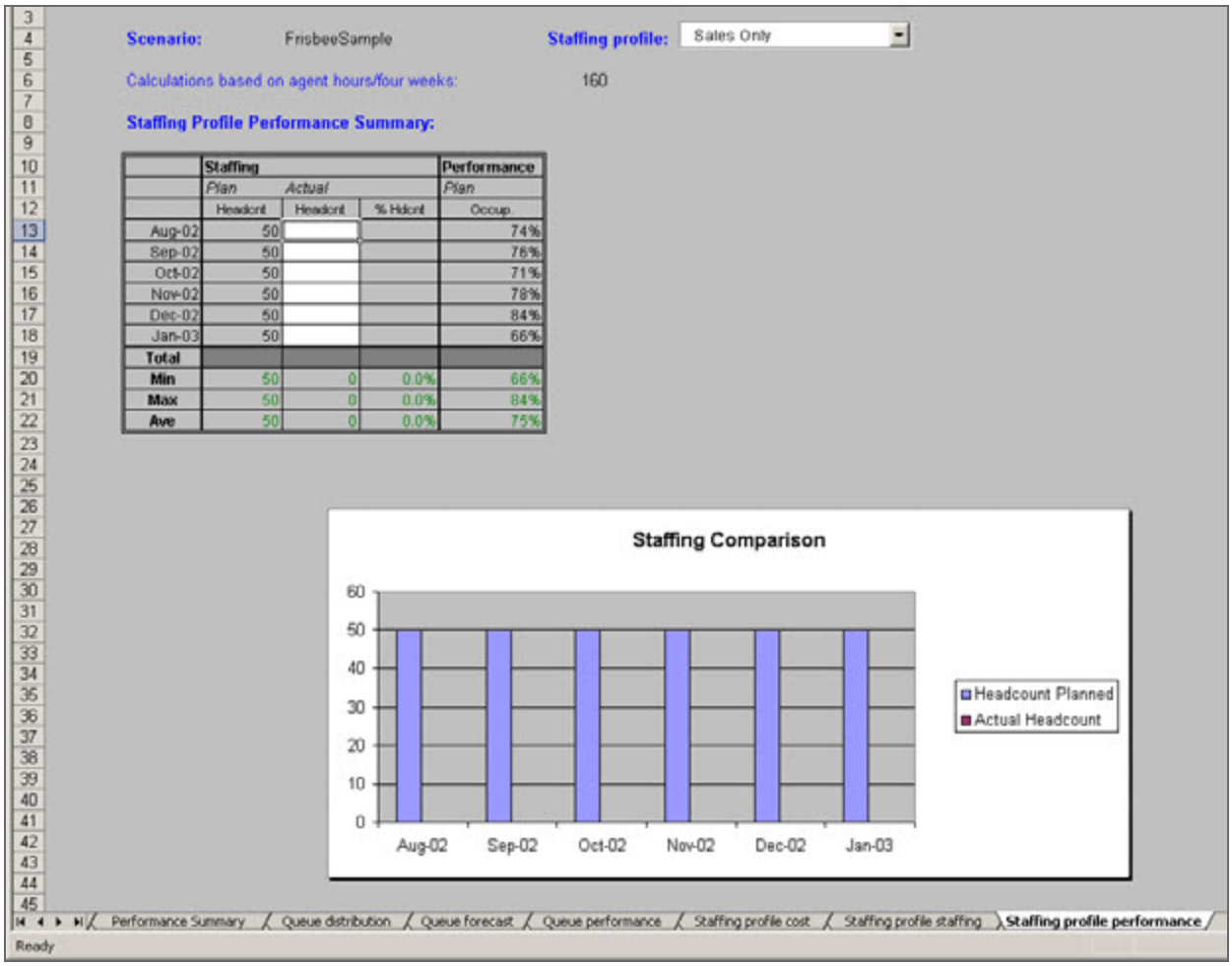


Staffing Profile Worksheets

There are three worksheets that show data specific to individual staffing profiles:

- Staffing profile cost
- Staffing profile staffing
- Staffing profile performance

Go to the Staffing profile cost sheet first. A drop-down list at the top allows you to choose any profile. This sheet then shows you cost details for that employee group. The Staffing profile staffing worksheet shows staffing movement specific to each profile. Staffing profile performance provides a place to track actual headcount as compared to planned headcount for each profile.



	Staffing			Performance
	Plan	*Actual*		*Plan*
	Headcnt	Headcnt	% Hdcnt	Occup.
Aug-02	50			74%
Sep-02	50			76%
Oct-02	50			71%
Nov-02	50			78%
Dec-02	50			84%
Jan-03	50			66%
Total				
Min	50	0	0.0%	66%
Max	50	0	0.0%	84%
Ave	50	0	0.0%	75%

Comparison Graph

Display a graph of data from several scenarios by clicking the graph icon  next to the queue or staffing profile name or Totals.

Graphing Data

1. **Select the attribute to graph**: Click next to the row you want to graph. Only applicable attributes are shown.
2. **Select the scenarios to graph**: If you have two or more scenarios open, you can select any or all of them to include in the graph.
3. Click **Set** to display the graph.
4. **Select a scenario to make it active**: You can see the values in the active scenario by holding the cursor over a point.

You can change the data for editable attributes on the graph by dragging the data point with your cursor.

Printing Graphs

Click **Print** in the graph window.

Running the Simulator

In general, you specify values in the white rows, which are displayed in green, and Strategic Planning computes the light blue rows for you. Select **Scenario...Simulate** and Strategic Planning will compute several measurements such as **Required FTEs** and **Over/under FTEs**. The numbers are displayed in red because they are new, having just now been computed.

Once the optimization is complete, observe the results. Specific fields that may have changed include:

- Hires for each profile for each month
- Total head count for each month
- Attrition (only if it is specified as a percent of head count)
- Occupancy
- Service levels
- Over/understaffing hours
- Costs

Fields that will not have changed include:

- Volume and AHT
- Intraday and intraweek distributions
- Required hours
- Transfers in/out
- Overtime hours
- Attrition (if it is not specified as a percent of head count)

After observing the results, determine whether the plan meets your goals and business requirements. If not, you can try optimizing again with different parameters. You can also make manual adjustments to the plan and simulate to see results.

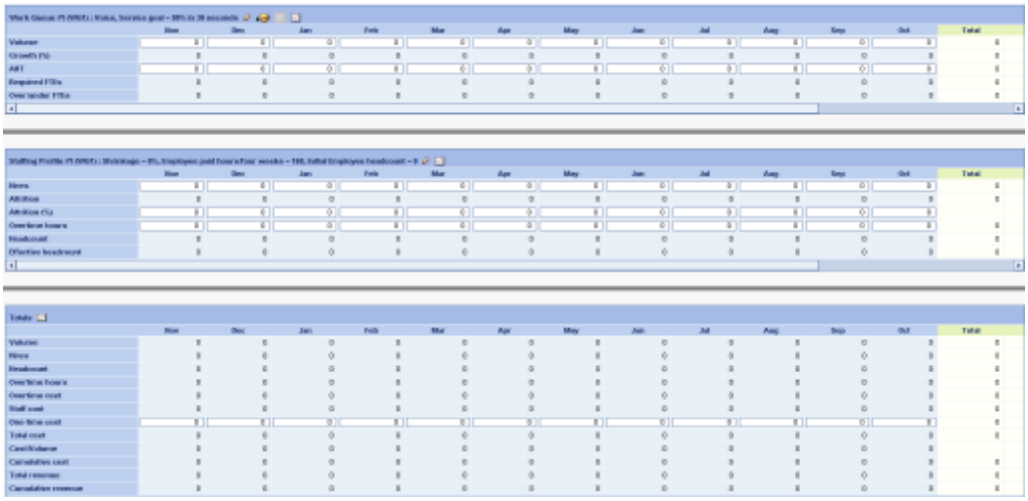
It is a good idea to save your plans as new scenarios if you think you may ever want to return to a previous version, or if you would like to compare several plans.

Configuring Cost Estimates

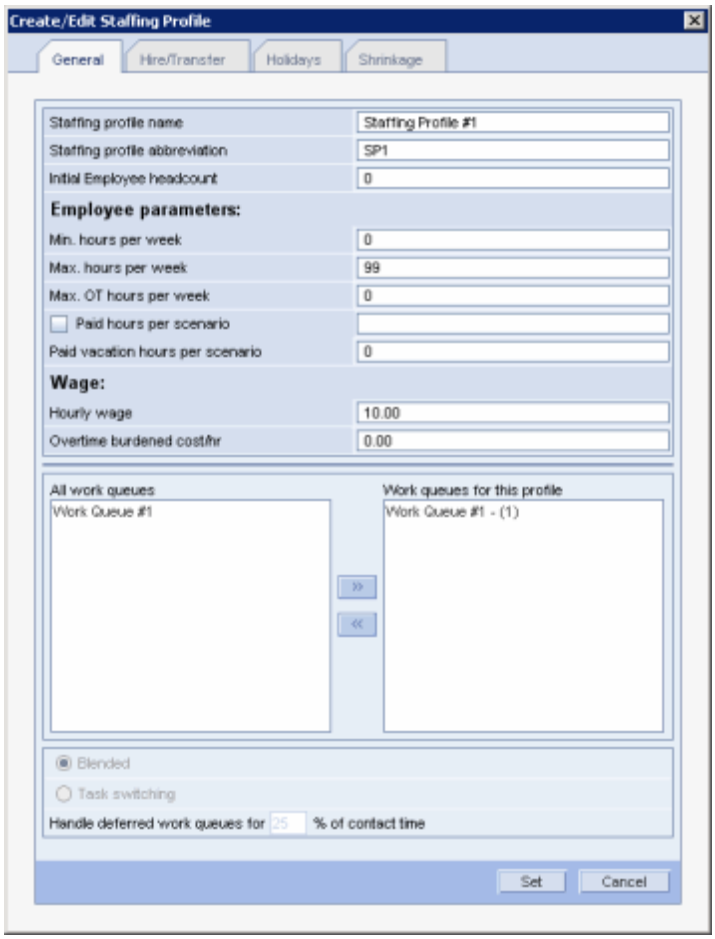
In Strategic Planner, there are several places in which to enter cost factors. These areas include:

- Staffing profiles:
  - Hourly wage
  - Overtime burdened cost/hr
  - Employee paid hours/month
  - Shrinkage (can also be entered in the staffing profiles pane)
  - Overtime hours for each profile for each month
- Totals
  - One time cost
- Cost parameters
  - Average wages
  - Burdens

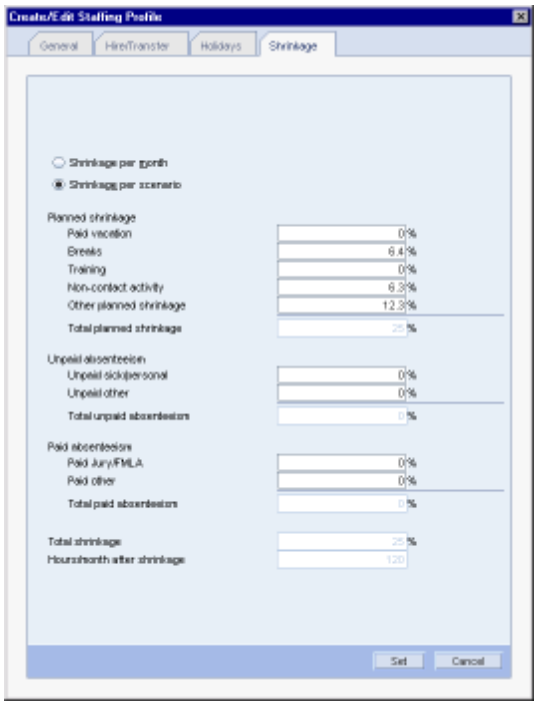
When working on cost estimates, it might be helpful to change your view to **Budgeting**. The **Budgeting** view displays a more compact set of rows, appropriate for working with cost factors.



One way to enter costing information for staffing profiles is to open the **Create/Edit Staffing Profile** window by clicking on the Staffing Profile's name just above its grid. Near the middle of the **General** tab screen is **Hourly wage**. The default is $10/hr, as shown. You should this to a realistic value for an employee group.

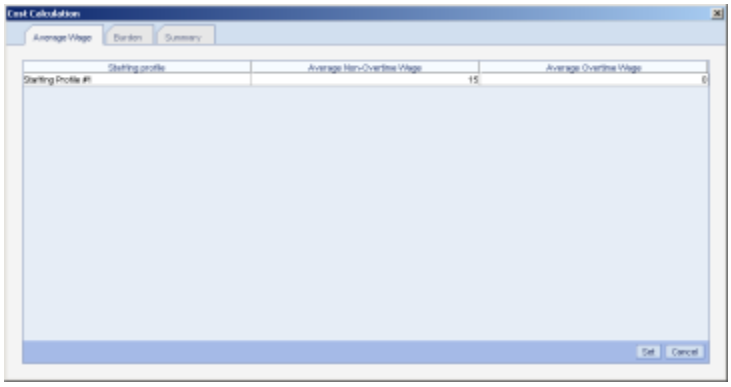


Costing information can also be entered on the **Shrinkage** tab. In general, you should specify these values in the **Specify shrinkage for entire scenario** mode. This way, you need only compute the values once here and they will be used for every month (or week) of the scenario. Note that these shrinkage values are specific to the selected staffing profile. This enables you to reflect actual differences in shrinkage and absenteeism between various employee groups accurately.

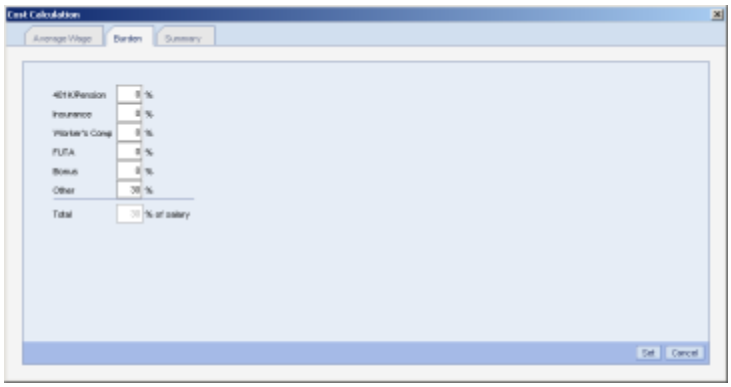


Click **Set** to close the window.

To examine and set Cost Parameters, select **Scenario..Cost Calculation**. Three tabs in this location provide summary cost information. The first tab, **Average Wage**, lists the average non-overtime wage and average overtime wage you have specified for each staffing profile. The wages can be edited directly on this window, enabling several staffing profiles' wages to be changed easily.

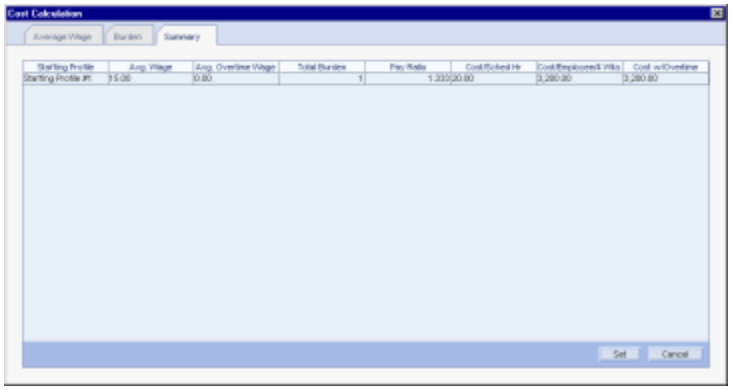


The second tab, **Burden**, requires you to fill in overhead/burden costs that are generally applicable to all employees and non-overtime wages. This is a good place to specify the overhead as shown and, further, to enable any variable costs to be figured into the costing as you wish.



The third tab, **Summary**, provides several useful values for each staffing profile:

- **Total Burden** is the proportion of the burden an employee carries.
- The **Pay Ratio** column computes and displays the number of hours an employee is paid for each effective hour of work done by an employee. This number is always larger than 1.0 because of absenteeism, provided that shrinkage has been defined. (Otherwise, by default, shrinkage is 0% and the pay ratio is 1).
- **Cost/Sched Hr.** specifies the effective cost of each scheduled hour of work.
- **Cost/Employee/4 Wks** computes the effective cost of 4 weeks for a single employee.
- **Cost w/Overtime** computes the effective cost of four weeks for a single employee with overtime factored in.



Time Banking

Time banking, also referred to as *annualized hours* is a common practice in Europe, specifically in Germany and France, and is starting to become more common in the UK. Companies using time banking often have full time salaried employees, but have large seasonal variations in their contact volume. Instead of using overtime, part-time employees, and the like to meet the variable load, they arrange with their full-time agents to work longer hours during busy times of the year, and fewer hours during slow times of year. In this way they ensure that through the course of the year their employees still work the same number of hours that they would have worked if they had worked a normal set number of hours each week.

Other companies prefer to balance the hours worked on a shorter period of time. Agents *bank* hours when they work more than the normal amount of time, and subtract from the bank when they work less than the normal number of hours.

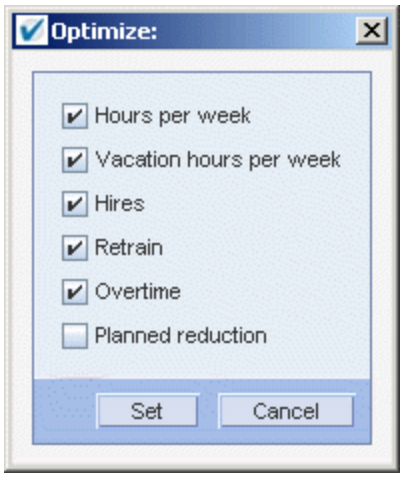
Time Banking in Strategic Planner

The enhancements to Strategic Planner for time banking fall into two major areas:

- Optimization
- Simulation

To meet the demands of time banking, Strategic Planner's functionality was enhanced to allow optimization of more than hiring plans. It now includes the ability to optimize several other plans, such that the service goal is achieved. In addition to hiring plan optimization, you can now optimize:

- Hours per week
- Vacation hours per week
- Retraining
- Overtime hours
- Planned reductions in staff



You can also enter data for the appropriate plans and simulate the results. See Running Simulations, page 24 for more information on simulations.

Once you have plan results in Strategic Planner that meet your needs, you can export the hours per week to Forecasting and Scheduling, which can be used for Time Banking scheduling purposes. The hours per week plan from Strategic Planner is exported to the Workforce Management database. Forecasting and Scheduling can then load the plan from the database.

General Work Flow for Time Banking Plans

If you have not already connected to the Workforce Management database, you will be prompted to enter your WFO suite user name and password.

In order to import and export data into the database, you must have the following privilege:

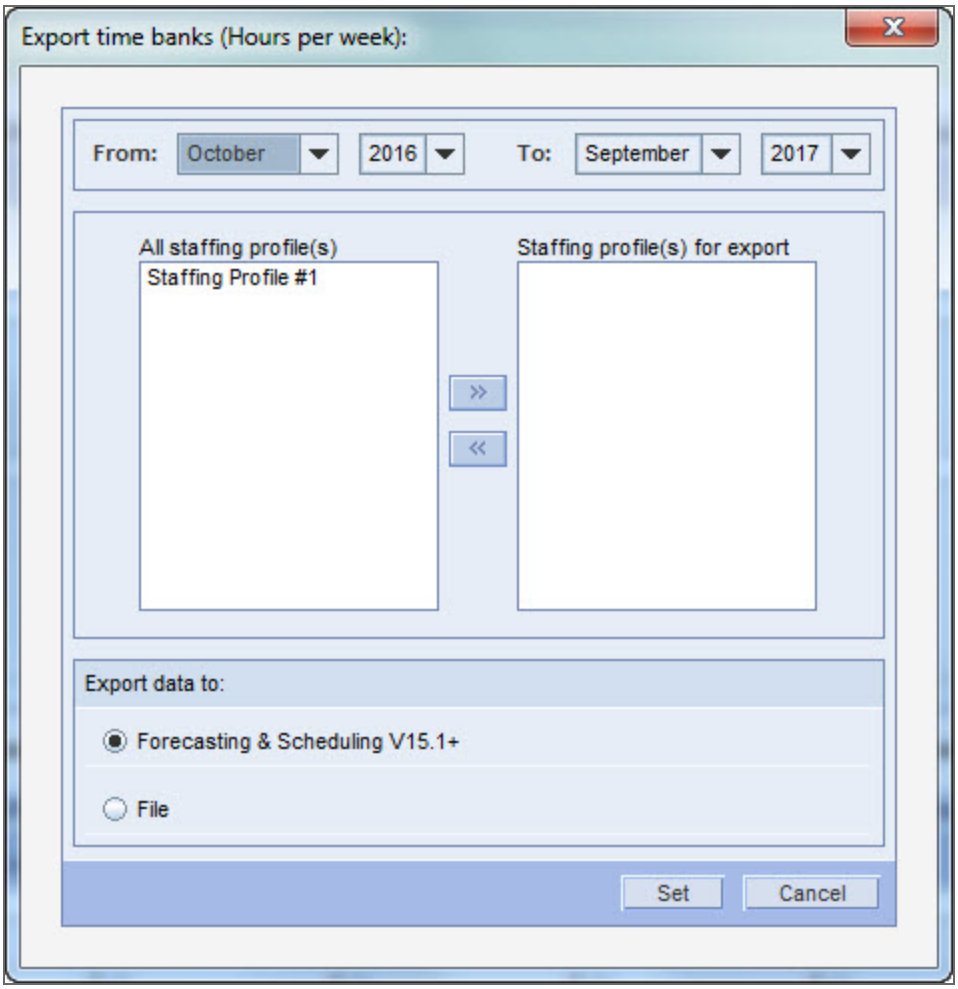
- View Organization

You must also have the correct Organization Scope along with the privilege indicated above.

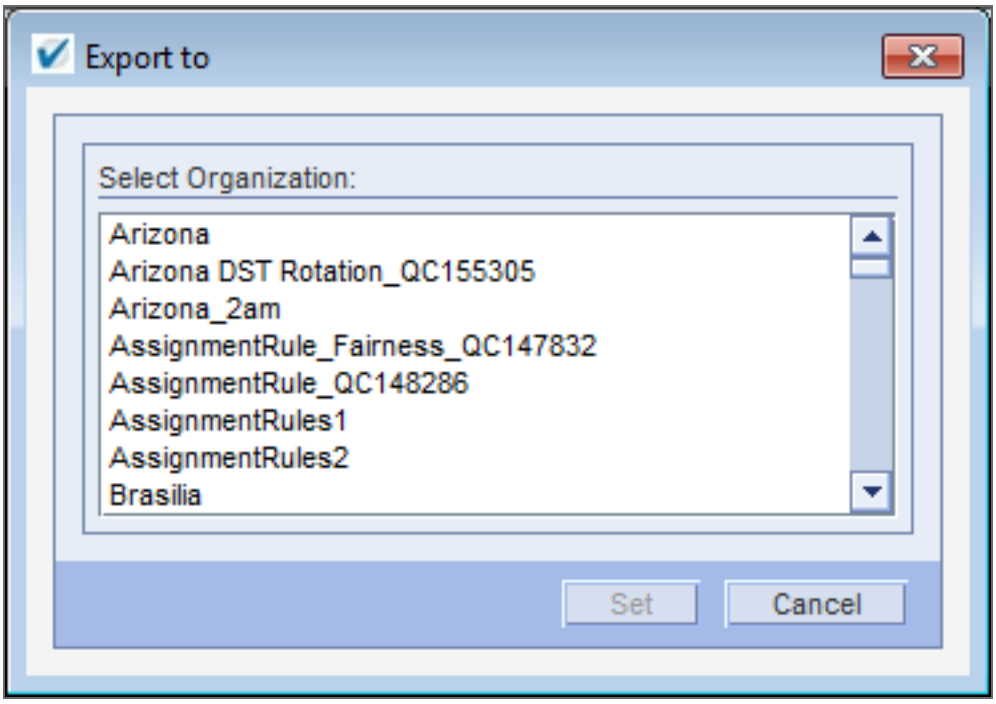
For more information on logging in to the application server for Strategic Planner, please refer to the *Desktop Applications Deployment Reference and Installation Guide*.

In general, you would use the following sequence to create a time-banking plan:

1. Open a new scenario.
2. On the main screen that opens up, create the required work queues. See Creating a New Work Queue, page 50 for more information.
3. Enter data for the work queues, either by entering the data manually, or importing the data.
4. Enter the work queue properties, as described in Editing Work Queues, page 36.
5. Create the required staffing profiles, as described in Creating Additional Staffing Profiles, page 64.
6. Enter the staffing profile properties. In particular, time banking uses the following fields on the **General** tab of the **Create/Edit Staffing Profile** window:
   - **Min. hours per week**
   - **Max. hours per week**
   - **Max. OT hours per week**
   - **Paid hours per scenario**
   - **Paid vacation hours per scenario**
7. Optimize the staffing plans.
8. Observe the plan, its service goals, and the like, in the main screen. Change any data as required and reoptimize until your plan suits your needs.
9. Use the **Staffing Profiles...Export time banks** command to export the hours per week plan to Forecasting and Scheduling, a .txt file, or a .csv file.



10 Select organization.



You can either select a single staffing profile to export or to export all staffing profiles, and can export hours per week to the selected organization.

The .csv file format is as follows:

Time bank definition Line: NAME,STARTDATE,ENDDATE,DAY OF WEEK,TARGETMINUTESWEEK1,TARGETMINUTESWEEK2,TARGETMINUTESWEEK3,...

Chapter 6

Strategic Forecasting

This section describes how to use Strategic Planner's Forecasting module.

Topics

Overview 97
Importing Strategic Forecasting Data 98
Marking Days in Strategic Forecasting 102
Viewing the Strategic Forecasting Main Window 109
Setting Up the Strategic Forecast 115

Overview

Strategic Forecasting is an enhanced method of forecasting that creates a long-term forecast (V and AHT forecast) at the daily level of granularity, based on past trends, seasonality, and past and future special events. This forecast is stored as part of the planner scenario. The forecasted V and AHT values can then be exported to Forecasting and Scheduling to be used for scheduling.

When the **Strategic Forecasting** option in the **Scenario properties** is selected, you can obtain long term forecasting using the Strategic forecasting algorithm.

The first step in obtaining strategic forecasting is to import daily history data.You can import historic data for forecasting for single or multiple work queues.

If historic data already exists, you can click the  icon, and the Strategic Forecasting window opens; you can import additional data from there. See Viewing the Strategic Forecasting Main Window, page 109.

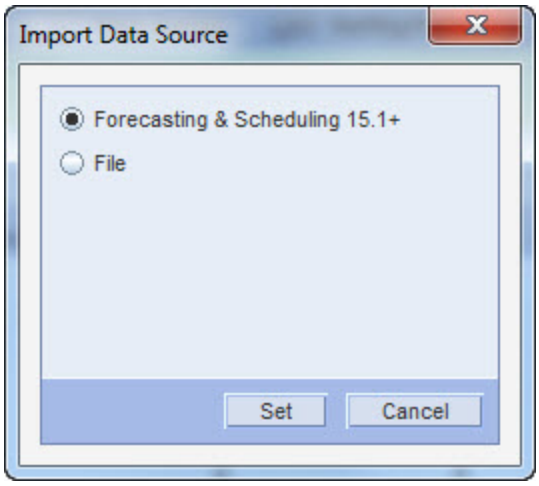
Once data is imported, the **Mark Days** dialog box opens. In this dialog box, you can mark any special events (holidays, billing days) or include/exclude outliers that the system detects in the history data. See Marking Days in Strategic Forecasting, page 102.

After you complete marking special events, the Strategic Forecasting main window opens and you can view tables and graphs for the forecasted V and AHT values, and perform all forecasting tasks. See Viewing the Strategic Forecasting Main Window, page 109.

Importing Strategic Forecasting Data

1. To allow the system to import strategic forecasting data, on the Strategic Planner menu bar:
   a. Select **Scenario**.
   b. Click **Properties**.
   c. Beside **Strategic Forecasting**, select **Yes**.
   d. Click **Set** to close the **Properties** dialog box.
2. On the menu bar, select **Work Queues** and click one of the following to select work queue(s) from the WFM database:
   - To import a single work queue, click **Import** and select a work queue from the list.
   - To import multiple work queues, select **Import Multiple work queues**.

   The **Import Data Source** box opens.



If you have not already connected to the Workforce Management database, you will be prompted to enter your WFO suite user name and password.

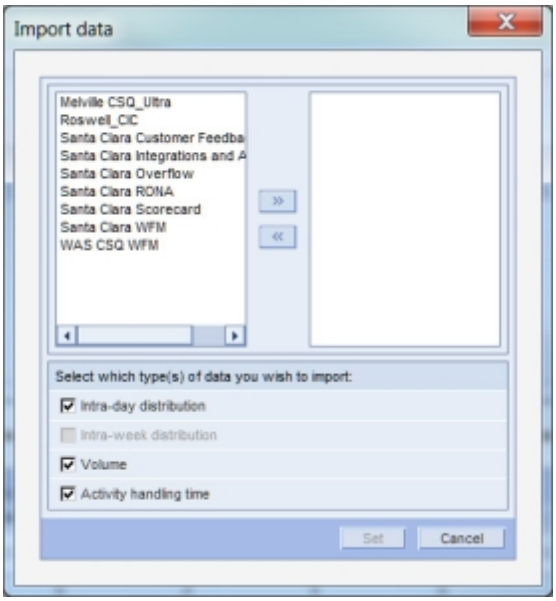
In order to import and export data into the database, you must have the following privileges:

- View Organization
- View Queues

You must also have the correct Organization and Campaign Scope along with the privileges indicated above. Otherwise, the work queues will not display in the import window.

For more information on logging in to the application server for Strategic Planner, please refer to the *Desktop Applications Deployment Reference and Installation Guide*.

3. Configure your import depending on the import option you selected:
   - If you selected **Import** to import a single work queue, the **Import Data** filter screen for a single queue opens:



In the top left panel, select the work queues you want to import, and click the double right arrows (>>). The selected data with dates is now listed in the right panel.

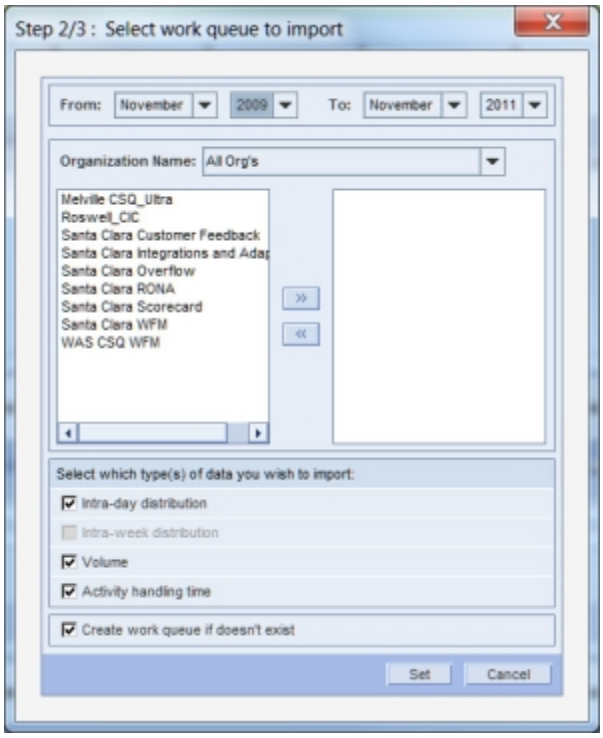
The work queue(s) you select are imported into Strategic Planner's Forecasting module. If you select multiple work queues from WFM, an aggregated value is imported to a single work queue in Strategic Planner Forecaster.

Select the data types you want to import.

Click **Set**.

The **Mark Days** dialog box opens to allow you to mark special days for your forecast. For details, see Marking Days in Strategic Forecasting, page 102.

- If you selected **Import Multiple work queues**, the **Select Work Queue to Import** filter screen opens:



Select the **From** and **To** dates for which you want the historical data.

To select work queues specific to a particular organization in WFM, next to **Organization Name**, click inside the drop-down list box and select the organization.

In the top left panel, select the work queues you want to import, and click the double right arrows (>>). The selected work queues with dates are now listed in the right panel.

Select the type data types you want to import.

Select the **Create work queue if doesn't exist** option if Strategic Planner needs to create a new work queue to correspond to work queues being imported from the WFM database. Once the new work queue is created in Strategic Planner, the WFM database work queue values are imported.

Click **Set**.

The **Mark Days** dialog box opens to allow you to mark special days for your forecast. For details, see Marking Days in Strategic Forecasting, page 102.

Additional Notes on Importing Strategic Forecasting Data

A queue will be visible in the **Import Data** window if it has historical data, is part of a scheduling period, and be marked as type 0 or 2.

Once you add a queue, if the scenario is not strategic and is weekly, only the weeks in the past that fall into the scenario's date range will show up in the week selection list. For example, if your scenario is January 1 to April 1, it will not show historical data from April to December.

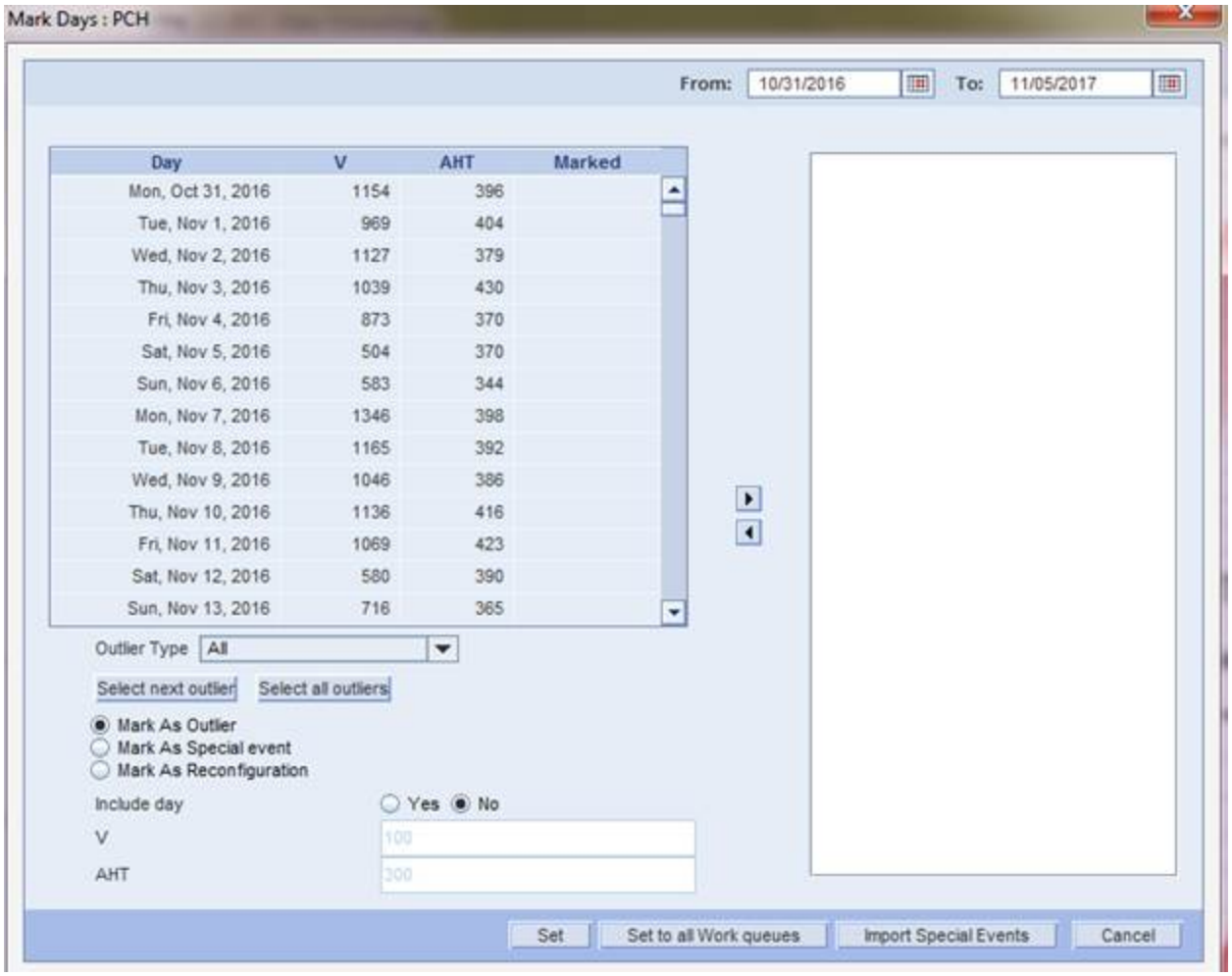
If the scenario is strategic and importing multiple queues, only the selected date range will display.

For non- strategic monthly scenarios or strategic scenarios importing just one queue, it will show all historical data.

Marking Days in Strategic Forecasting

When you have finished importing data from the WFM application, the **Mark Days** dialog box opens. It is important to **Mark Days** that do not follow the typical pattern being used by Strategic Forecasting.

You can also open this dialog box by clicking the **Mark Days** button at the bottom of the Strategic Forecasting page.



The left side of this dialog box displays a table for each date in the range that was imported. Each row contains the **Day**, the corresponding Volume (**V**), Average Handle Time (**AHT**) and an indicator if the day has been **Marked**. If the day is **Marked**, a value of **Yes** will appear in this column. Otherwise, this field will be empty.

Procedure

1 Select a **Work Queue(s)**.

This field will appear in the top left corner of this dialog box only if you imported multiple work queues using the Import Multiple work queues option. Click the drop-down arrow next to the **Work**

Queue(s) field at the top left of this dialog box to select the specific work queue that you will use to Mark Days.

2 Select a date range.

Use the **From** and **To** fields in the top right corner to select the range. The date range will default to either of the following:

- The historical date range that is displayed as part of the **Mark Days** wizard
- The date range that appears on the initial screen of Strategic Planner when you open the **Mark Days** window

3 Select the day(s) you want to mark on the left side of this window.

4 Choose the type of marked day for each day you selected: **Outlier**, **Special Event** or **Reconfiguration**.

5 When all of the day(s) have been marked, click the double right arrow (>>).

Your selected dates appear in the right panel of the **Mark Days** dialog box with the type of marked day.

6 After confirming the marked days, click the **Set** or **Set to all Work queues** button to apply the marked days to the Strategic Forecast.

Related topics

Specifying Outliers, page 103

Specifying Special Events, page 104

Specifying Reconfiguration Days, page 106

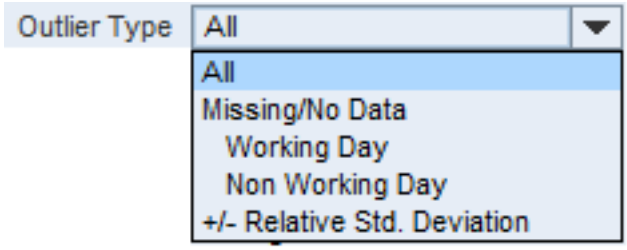
Specifying Outliers

Identify the **Outliers** in the left side of the **Mark Days** dialog box. **Outliers** are identified in the set of historical data being used for your forecast. You can either click on the **Outliers** in the left panel, or Strategic Forecasting provides some tools for helping you to identify the **Outliers** so you can select them.

Procedure

1 Identify the Outliers.

2 Click the drop-down arrow for the **Outlier Type** field.



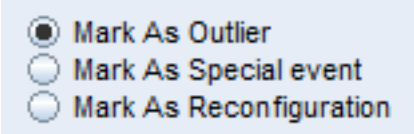
3 Select one of the following Outlier Types:

- **All** – Selects all Outliers that meet the Outlier criteria
- **Missing/No Data** with optional sub-options of **Working** day or **Non Working Day** – Selects those days that have no data, with the additional criteria of the sub-option if selected. The following sub-options are also available:

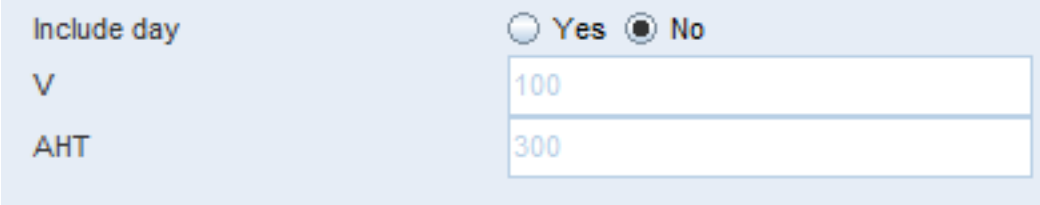
- **Working Day**
- **Non Working Day**

- **+/- Relative Std. Deviation** – selects days which are way above or below the Relative Standard deviation of the data in consideration

4 After identifying the outlier(s), select **Mark as Outlier**.



5 If the day should be included, click **Yes** next to the **Include day** field.



6 Type in the preferred **Volume** in the **V** field.

7 Provide the preferred **Average Handle Time** in the **AHT** field.

If you choose the Include option, these new values will be used in your Strategic Forecast for this day. If you do not choose to override the values with your own entries, Strategic Forecast will use other data in your scenario to override the values. The following rules will apply in the order listed below to calculate the values to override the **Volume** and **Average Handle Time** on this date, using the first rule that has data:

1 the previous week's value on the current day of the week
2 the following week's value on the current day of the week
3 subtract a month and find the forward day of the week
4 go forward a month and find the forward day of the week
5 average the previous day with data against the next day with data
6 previous day
7 next day

Once the correct information has been specified in the handling of the outliers, click the right arrow button to complete the process of specifying the date(s) as outliers.

Related topics

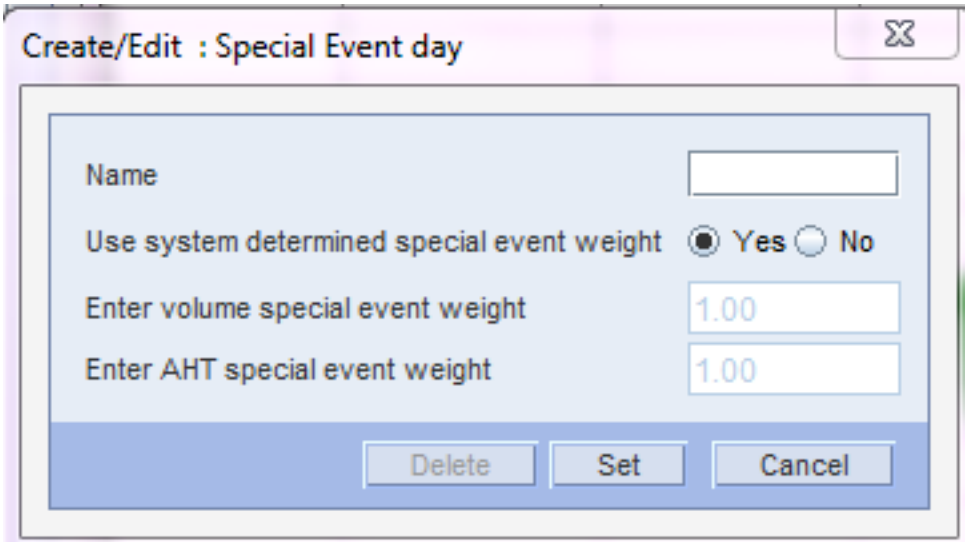
Specifying Reconfiguration Days, page 106
Specifying Special Events, page 104
Marking Days in Strategic Forecasting, page 102

Specifying Special Events

To specify a Special Event you will want to set the Marked day as type Special event Special Events are identified in the date range being forecasted.

You will be given a drop down box to select a previously used Special Event Name, or to create or edit one.

If you choose to create a new Special Event, the Create/Edit Special Event day pop up window is displayed.



Type in the name of the Special Event day.

The **Volume** and the **AHT** can be modified on the **Special Event** days in one of the following ways:

- You indicate you want to enter your own special event weight by selecting the **No** radio button in the **Use system determined special event weight** field. Then you can enter the weight you want applied to the volume and average handle time in the fields below.
- If you choose **Yes** to have the system determine the special event weight, it will take the average of all the days you tagged to have this special event name.

Once you've defined each special event name and identified the corresponding dates, use the right arrow to move them to the right panel box. The dates will be tagged with the special event name and characteristics.

If you have a specific set of special event names and dates, you can load them from either a .csv or .txt file prior to marking your special event days. Loading the file will create the special events with this name.

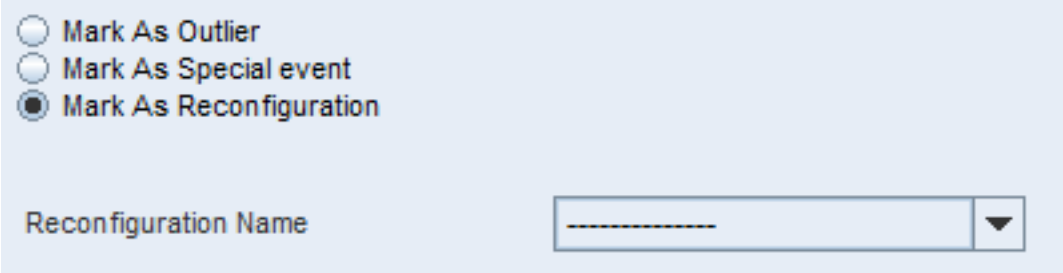
The following needs to be applied in the Special Events import file:

- Each line is just 'Name,Date"
- Name cannot be "null" and must have at least one letter
- Date is in m/d/yyyy format (5/1/16 would be the year 0016)

- Can have multiple lines with the same name
- You can not specify weights for the special events

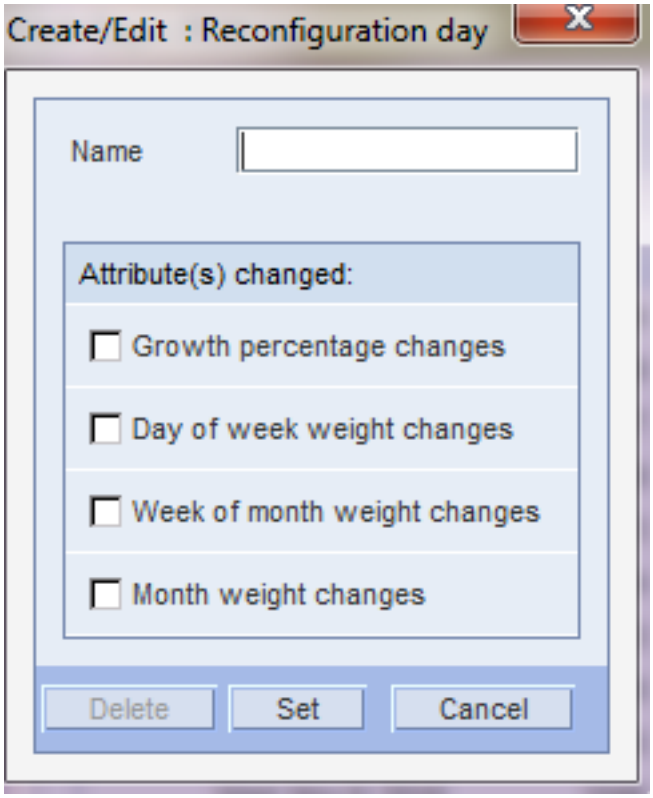
Specifying Reconfiguration Days

To specify a day where a reconfiguration occurred you will want to set the Marked day to as **Mark As Reconfiguration**. Reconfiguration days are identified in the set of historical data being used for your forecast.



Click the drop down arrow to select a previously used **Reconfiguration Name**, or to create or edit one.

If you choose to create a new **Reconfiguration Name**, the **Create/Edit Reconfiguration Day** will display.



Each of these options can determine how the reconfiguration affects the calculations.

- **Growth percentage changes** – Selecting this option, means all days in the month selected will be excluded in the calculation of the growth percentage to be applied when calculating the forecast. For example, if you see a growth percentage between 5 and 10%, but in June 2016 in your historical data range you had special circumstances and had a growth of 50%, you could choose any day that month, and specify it as a reconfiguration of type Growth percentage changes. This would ignore the volume for June in 2016 when determining the overall growth percentage for your strategic forecast.
- Day of week, Week of month, Month weight changes – If you mark a day as a reconfiguration day with one of these changes, all data prior to that day is excluded from the calculation of the specified factor(s). The factors are listed on the week details page
  - If you mark a day with **Day of week weight changes**, only the data after that day is included in the Day Factor calculation
  - If you mark a day with **Week of month weight changes**, only the data after that day is included in the Week Factor calculation
  - If you mark a day with **Month weight changes**, only the data after that day is included in the Month Factor calculation

Volume (V)

Date	Actual	Day Factor	Week Factor	Month Factor	SE
Mon, Dec 26, 2016		1.135	0.651	0.914	
Tue, Dec 27, 2016		1.19	0.651	0.914	
Wed, Dec 28, 2016		1.304	0.651	0.914	
Thu, Dec 29, 2016		1.172	0.593	0.914	
Fri, Dec 30, 2016		0.968	0.593	0.914	
Sat, Dec 31, 2016		0.597	0.593	0.914	
Sun, Jan 1, 2017		0.561	0.942	0.903	

If the user mistakenly enters reconfiguration dates that would affect each other, only the last reconfiguration entered that includes the date will be applied. Other reconfigurations that cover this date would be completely ignored for all dates.

Additional Controls

Four additional controls are located at the bottom of the **Mark Days** dialog box:

- **Set**: Sets the current selection in the mark day's dialog to the current work queue.
- If you imported a single queue, you can click the **Set to all Work Queues** button:

  When you click this button, you can set the current selection to all the work queues. If marked days are available in other work queues, only marked days corresponding to this period (**From** and **To** dates of the current work queue) are updated. Marked days that are not in the viewing period are not affected.

  For example, say you are viewing a period in Q1 from 01/01/2004 through /01/31/2004

The following days have been marked in each work queue:

Q1 – 01/03/2004, 01/05/2004 – marked as outliers

Q2 – 01/04/2004/, 02/03/2004, 12/09/2003 – marked as special events

If you click **Set to all Work Queues** in Q1, the marked days in Q2 would change to:

Q2 - 01/03/2004, 01/05/2004 – marked as outliers

02/03/2004, 12/09/2003 – marked as special events

- If you imported multiple work queues with the **Import Multiple work queues** option, you can click the **Set to all Imported Queues** button:

  When you click this button, options you select in the **Mark days** dialog box are applied to the multiple work queues you imported.

  This is similar to the **Set to all Work Queues** option for single imported work queues described above.

- **Import Special Events**: You can import special event days from a file. The data in the file should contain a special event name and a date, separated by a comma:

  <special_event_name>, <MM-DD-YYYY>

  When special events are imported from a file:

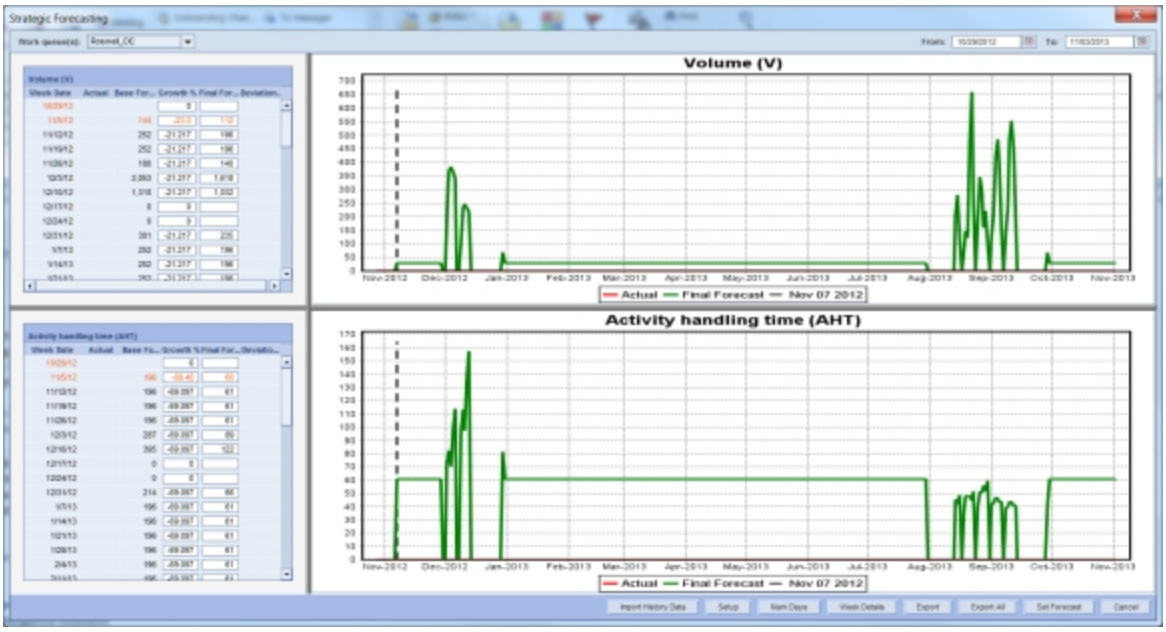
  - Special events are created by the system for each special event name specified in the file. Special event properties are set to the default.
  - The date is marked as the specified special event and added to the list box.
  - The value of the **Marked** column in the table is changed to **Yes**.

- **Cancel**: Cancel all the changes made to this dialog.

Viewing the Strategic Forecasting Main Window

As described previously, the Strategic Forecasting main window displays tables and graphs for the forecasted V and AHT values.

At the top of the screen, select the relevant work queue from the Work queue(s) drop-down list.



Data in the tables show the weekly sum of the V/AHT. (You can view the daily forecast by going to the week details dialog.)

The title of the table specifies whether it's a V forecast or AHT forecast. Week start dates are shown in rows. The columns of the table are:

Column	Description
Week Date	Week's start date.
Actual	Actual weekly sum (V/AHT).
Base Forecast	Weekly sum of system forecast. Forecast values shown for past dates are same as the history data (if history data is available).
Growth %	Editable. The default is 0.
Final Forecast	Base Forecast * (1 + (Growth %/100))
Deviation %	(Actual – Final Forecast)/Actual * 100

In both the V and AHT tables, the **Growth %** column and **Final Forecast** column are editable. When you select a particular row, the corresponding row is highlighted. When you make any changes, the corresponding row changes color. When you make changes to the **Growth %** and/or **Final Forecast** values in the weekly mode, the values in the daily mode are changed appropriately, and vice versa.

When you create a new strategic forecasting scenario, the forecast is obtained for future date. If there is no data available in the past, the base forecast and final forecast data are empty. The forecast in the future is shown in black. When you edit a value, the color changes to green.

When you open an existing scenario that has forecast data from the past, the forecast obtained in the past is shown in red; the forecast in the future is shown in black.

V and AHT Graphs

The X- axis of the graph shows dates (daily granularity, not weekly) and the Y – axis values correspond to the V or AHT. From the graph, you can view:

- Actual curve – shown in red
- Final forecast curve – shown in green
- Current date – shown as dashed lines

Date Range

The date range of the current scenario is also displayed. The **From** date corresponds to the week start date, and the **To** date corresponds to the week end date. When a new strategic forecasting scenario is opened, the dates default to show the week that includes the scenario start date and the scenario end date. You can view a different date range by selecting a different date using the Calendar selector.

- For a weekly scenario, the **From** calendar selector by default is set to the start day of week of the scenario. The **To** calendar selector by default is set to the end day of week of the scenario.

  For example, given a scenario start date of 03/28/2007 (Wednesday) through 03/18/2008 (Tuesday):

  The **From** calendar selector would show all Wednesdays in that time range enabled; other days would be disabled.

  The **To** calendar selector would shows all Tuesdays in that time range enabled; other days would be disabled.

- For a monthly scenario, the **From** calendar selector by default will have all the Mondays in that time range enabled; other days would be disabled. The **To** calendar selector will have all the Sundays in that time range enabled; other days would disabled (irrespective of the start and end day of week of the scenario).

  For example, given a scenario start date of Mar 01 2007 (Thursday) through Jun 30 2007 (Sat):

  The **From** calendar selector would show all Mondays in that time range enabled; other days would be disabled.

  The **To** calendar selector would show all Sundays in that time range enabled; other days would be disabled.

A work queue selector is located near the top of the main screen, allowing you to select the desired work queue.

Additional Controls

The Strategic Forecasting main window also has the following controls:

Control	Description
Import History Data	Opens the **Import** dialog. Allows you to import different history data.
Setup	Opens the **Setup** dialog.
Mark Days	Opens the **Mark Days** dialog.
Week Details	Opens the **Week Details** dialog box. See Viewing Week Details, page 111 for more information.
Export	Allows you to export information either to Forecasting & Scheduling or to a file.
Export All	Use this option to export multiple work queues from Strategic Planner to the WFM database.
Set Forecast	Saves the weekly/monthly sums to the current planning scenario. The monthly (or the weekly) aggregate of the V and AHT values corresponding to the scenario's hours of operation (HOO) are calculated. These are displayed on the Strategic Planning main screen. These aggregates are found for each work queue. To open and view the saved forecast, click the Forecast icon in the Strategic Planner main screen. The system opens the Strategic Forecast main screen directly. When a Strategic Planner scenario is saved, the daily history and forecast values are saved as part of the scenario.
Cancel	Does not save changes made to the current strategic forecasting scenario.

Viewing Week Details

You can view the details for a week by selecting that week in the left-hand table and then clicking **Week Details**.

The **Week Details** dialog box opens in a separate window. This dialog box displays V and AHT data for each day in the selected week in tables consisting of the following columns:

Column	Description
Date	Date of the day in the week.
Actual	Actual V/AHT values.
Day Factor	The day effect calculated for this day. This factor is the ratio of the day's V compared to the average daily V of that month. (**<day's_V_of_that_month>/<average_daily_V_of_that_month>**).
Week Factor	The week effect calculated for this week. This factor is the ratio of the week's V compared to the average weekly V of that month (**<week's_total_V>/<average_weekly_V_of_that_month>**). For the fifth week, values are compared relative to the previous weeks in the month.
Month Factor	The month effect calculated for this month. This factor is the ratio of monthly V compared to the average monthly V. (**<month's_total_V>/<average_monthly_V>**).
SE Factor	Special event factor. The system-calculated SE factor is found by comparing the marked day against the regular day.
Base Forecast	The system forecast obtained for this date. **Past Average * Day Factor * Week Factor * Month Factor * SE Factor**.
Growth %	The trend. (Growth % cannot go below -100.)
Final Forecast	**Base Forecast * (1+(Growth/100))**

In the **Week Details** dialog box, both growth and the forecast data columns are editable.

When the **Growth %** values in the **Week Details** dialog box are edited, Strategic Planner calculates the weekly **Growth %** by taking the weighted average of the **Growth %** (weighted by base forecast values).

Exporting Strategic Forecast Data

You can export to either the Forecasting and Scheduling application database or a file.

If you export to a file, the file can be either in .csv (comma-separated values) or .txt format. The default format is .csv.

Related topics

Exporting Single or Multiple Work Queues to the Database, page 113

Exporting to a File, page 114

Exporting Single or Multiple Work Queues to the Database

1 Do one of the following:
- To export a single work queue at a time, click **Export**.
- To export multiple work queues at a time,click **Export All.**

With the **Export** option, the data is exported to the **StrategicForecast** table in the database.
- With the **Export All** option, the work queues in the scenario are mapped to work queues in the WFM database based on the name of the work queues.

If a successful match cannot be found based on the name in the WFM database, the data for that work queue is not exported. A status message at the end displays the list of Queues that did not get exported

2 In the **Export to** dialog box, select the **Forecasting & Scheduling** option.

3 In the **Export Queues** box, do one of the following:
- If you selected the **Export** option, select the work queue whose data you want to export to the database.
- If you selected the **Export All** option, select all or some of the work queues whose data you want to export.

4 Click **Set**.

The data that is exported consists of:
- Time (date)
- Work Queue ID (for the work queue you selected)
- V
- AHT (forecasted)

If you click the **Set** button without having first selected a work queue, Strategic Planner displays the message: **Select a work queue**.

If you have not already connected to the Workforce Management database, you will be prompted to enter your WFO suite user name and password.

In order to import and export data into the database, you must have the following privileges:
- View Organization
- View Queues

You must also have the correct Organization and Campaign Scope along with the privileges indicated above. Otherwise, the work queues will not display in the import window.

For more information on logging in to the application server for Strategic Planner, please refer to the *Desktop Applications Deployment Reference and Installation Guide*.

Exporting to a File

If you selected the Export or Export All option to export a single work queue or multiple work queues to a file, the following data is exported with the name and to the folder you specify

- Work Queue Name
- Time (date)
- Volume (V)
- Activity Handle Time (AHT)

If you selected Export All and exported multiple work queues to a file, work queue data is grouped according to each work queue name.

You can save files as .csv or .txt files.

Setting Up the Strategic Forecast

When you click the **Long term forecast** icon on Strategic Planner's main screen, Strategic Planner obtains an initial strategic forecast. In doing so, it assumes several values as the default for factors such as history period, trend type, etc. However, you can select a different date range, trend type, and so forth, by clicking **Setup** button in the Strategic Forecasting main window. The **Setup** dialog box opens, allowing you to make your selections.

The set-up properties are assigned per work queue. The setup dialog consists of:

- **Growth trend**:
  - **Scalar** – Growth % is constant. This is the default selection.
  - **Linear** – Growth % constantly increases or decreases.
- **Growth preference**:
  - **Month over month** – Used when less than one year's data is available.
  - **Month in year/ Month in prev. year** – Used when more than one year's data is available for forecasting.
- **Intra week distributions** – Day of the week and week of the month factors:
  - **Global** – Intra-week factors are identified using all data. This option is set as the default when the history data has less than one year of data .
  - **Per month** – Each month's intra-week factors are identified independently. This option is the default when there is more than one year of history data is available.
- **History period**
  - **Use all data** – Use all the data imported from the data base/ file for forecasting (regression analysis).
  - **Select data range** - Use the **From** and **To** date selectors to use data from the specified date range for forecasting (regression analysis).
- **History period for special events** - Date range for the historical data. This option is used to select the data set to be used for special event day treatment.
  - **Same as above** – Uses the same set of data used for regression analysis.
  - **Use all data** – Uses all the data imported from the database or from a file for the special event day treatment.
  - **Select data range** - Use the **From** and **To** date selectors to use data from the specified date range for the special event day treatment.
- **Weights for each factor**:

  You can specify a higher or lower weighting for each of the factors used to determine the forecast. By default, all weights are 1.0.

  For example, when the weight is set to 0 for a week factor, the factor is completely turned off. The system calculates a forecast without using a week factor.

  When certain factors are given higher weighting, the system gives a higher priority to those factors in the forecast calculation.

  Also, weights are determined relative to other weights. If all the weight factors are set to 5 (or another number), this has the same effect as assigning all the weights as 1.

The Growth weight is multiplied by the final forecast values. The default value is 1. For example, if the Growth weight is 10, the base forecast is 244, and the Growth % is 10, the Final Forecast = BF (1+0.1) * 10 = 244 * 1.1 * 10 = 2684.

Click **Set** to save your selections for the current work queue only.

Click **Set to all Work Queues** to save the selections for all the work queues.

When data is imported, Strategic Planning assigns default values in the setup dialog. If you make changes to the setup and reimport data, these selections are not affected. that is, Strategic Planning assigns default values only the first time.

Strategic Planner Sample Use Case Scenarios

The sample user scenarios demonstrate the functionality of Strategic Planner as an independent module, not integrated with Forecasting and Scheduling. If integrated, base volumes and AHTs can be imported and modified.

Topics

Plan Creation 118
Strategic What-if Evaluation 120
Calibration Technique Overview 123

Plan Creation

Create the first plan so you can obtain a cost estimate for requirements.

Related topics

Creating a First Plan, page 118
Using Outsourcer to plan for a quote, page 119

Creating a First Plan

Create a skill-based, multi-contact operation to create an initial annual plan for next year.

Procedure

1. Click File > New.
2. Specify date range (1 year) and plan.
3. Create three work queues and specify their properties:
   - Consumer Sales
   - Pro Sales
   - Email Orders
4. Provide the abbreviations for each work queue.
5. Specify the work queue types.
6. Specify the service goals in the appropriate units (2 days for Email Orders).
7. Create three groups, to reflect the three profiles into which the employees currently fit:
   - Entry level (CS, Eml)
   - All (CS, PS, Eml)
   - Top (PS)

   For each profile user specifies which work queue(s) the profile services (abbreviations are pulled based on this specification). Entry is marked as the only hireable profile, and Xfer in/out is marked on all three appropriately. Planned and unplanned shrinkage is specified for each. Top profile has high planned shrinkage (mentoring) while Entry level has high unplanned shrinkage (absenteeism).
8. Enter volume forecast and AHT for each work queue.

   AHT is fixed but different for each work queue. Volume forecast is entered initially using projected volumes with a 5% growth month-over-month. Then the user defines a new event: Version 2.0 Release. User specifies a volume spike for each work queue associated with this event as well as a spike in AHT. At this point Staff Hrs Need shows needed hours on a work queue-by-work queue basis.
9. Enter Hiring activity and estimate attrition on a profile-by-profile basis.

   User specifies attrition as 7% monthly, then makes a manual modification for October and November to 12%. Next user enters initial headcount for start of plan for each Profile and observes disparity between Staff Hrs Need and Effective Staff Hrs on each work queue. User adds three hiring quantities in the year to compensate for attrition and disparity and also to ensure that occupancy (shown Profile by Profile) is within a nominal range. Specify transfer training from Entry level to All to compensate for disparity in PS work queue.

10 Specify cost model then view cost estimates as a result of the hiring plan.

11 Generate Excel report.

Using Outsourcer to plan for a quote

An outsourcer will want to create an estimate of staffing hours and costs to satisfy a potential customer's requirements. In this flow, the outsourcer is creating such a rough model in very short order for a potential customer that is outsourcing a single work queue or product.

Procedure

1 Click File > New.

2 Specify date range (6 month plan starting 01/2002)

3 Enter the plan name (PiesRUsEstimate).

4 Open Work Queue Properties

5 Change name from “work queue 1” to “Pie Orders”.

6 Set type to Voice (immediate).

7 Set requested service goal (90% in 30 seconds).

8 Set name to Pie Only employees.

9 Review other parameters, set at the user's default values from his standard plan, including planned and unplanned shrinkage and full-time employee total staff hours per month.

10 Forecast: User selects Forecast activity and clicks on volume. User specifies 3,000 calls in the first month and a growth of 3%. User selects flat line for AHT and specifies 175 seconds across the board. On the Distribution pane the user chooses one typical distribution shape with lunch/dinner peaks and also specifies operating hours/days. At this point, the grid already shows Staff Hrs Need on a monthly basis.

11 Hiring: User selects Hiring activity, specifies initial Hires value then goes to Attrition and specifies raw monthly number of employees lost. Using Staff Hrs Need and Effective Staff Hrs the user plans monthly hiring quantities to meet need and compensate for attrition.

12 Cost: User selects Cost activity, looks over parameters (based on user's default values), and then examines monthly cost estimates for the plan.

13 Report: User selects the Export function and selects Complete Excel Report to generate an Excel multi-pane spreadsheet summarizing the operation and input assumptions.

Strategic What-if Evaluation

This section covers multi-contact operations and cost saving changes related to them.

Multi contract operation scenario

A multi-contact operation is considering instituting an email response guarantee of 24 hours instead of the current average response time of 48 hours. Very simple manipulation in Strategic Planner can yield an estimate of the impact this would have on head count needs.

Procedure

1. Click File > Open.
2. Open the scenario.
3. Plan Duplicate/Split Compare: User views two copies of this 1-year plan and names the one that shall be changed 2002EmailGuarantee
4. Work Queue Properties: User opens Work Queue Properties on the email work queue and edits service goal from 48 to 24 hours.
5. Comparison: User compares staffing discrepancy, adds to current training episodes to balance staffing discrepancy, and identifies additional hiring needs and resulting costs.

Evaluation of Potential Cost Savings

Strategic Planner will enable large-scale structural transformations to a long-term plan, such as increasing the size of an operation significantly (through a merger for example) to understand the head count and cost repercussions of the merger. In this scenario, two operations have separate long-term plans. We “merge” them and immediately visualize and measure the performance enhancement.

Procedure

1. App Launch: User opens three windows and plans: two old plans for each of two old operations and one new plan based on the customer’s operation that will grow.
2. Copy work queues: User employs copy/paste functionality to copy every work queue from old plan to the merged plan.
3. Copy Profiles: User employs copy/paste functionality to copy every profile from old plan to the merged plan. At this point, the new plan contains both older plans, simply concatenated into one.
4. Add Profiles: User defines new profiles representing cross-training across centers. This includes a new entry-level skill group that services both entry-level work queues of the original operations.
5. Plan Training: User selects the Training activity and, as training heads are added to initially empty cross-trained profiles, staffing disparities across work queues improve and eventually some overstaffing at entry level is apparent due to increased efficiency.
6. Reduce Hiring: User selects the Hiring activity and sees Attrition and Head Count trajectory. By lowering future hiring plans, the user avoids overstaffing by naturally using attrition. The final result: an environment that achieves staffing needs but operates at increased efficiency, and therefore requires less hiring in the long-term hiring plan.

Evaluating Salary Incentives for Additional Training

Strategic Planner can predict the cost savings of conducting additional cross-skill training, and there it can help identify the appropriate salary increases to motivate employees to cross-train. In this scenario, a user identifies appropriate salary increase amounts by creating some cross-training and measuring the predicted cost reduction.

Procedure

1. App Launch: User launches Strategic Planner and creates split view or new/old plan configuration.
2. Training Planning: User adds monthly transfers from entry-level profiles to a cross-trained profiles. Adding the transfers lessens understaffing in both work queues.
3. Hiring Planning: User adjusts hiring plan, removing 10% of intended hires and thereby achieving same effective staffing hours as before (we need a split visualization for this).
4. Profile Salary Adjustment: User compares new cost estimate with original estimate, then enters profile properties and pushes up the average salary of the cross-trained profile. The aim is to motivate employees to reach this level of skill while ensuring that the cross-training process still nets a profit.

Justifying Recurrent Mentoring and Training Program

It is well known that additional training and, particularly, mentoring by a more senior employee, can lower handling times, increase customer satisfaction and even lower attrition. Strategic Planner can serve as a calculator that demonstrates the savings associated with this lowering of AHT, thereby enabling the user to identify a budget for the amount of recurrent training and overhead from a senior employee that is justifiable for the expected payoff.

Procedure

1. App Launch: User creates a new document or split-screens the existing plan for direct comparison.
2. Entry-Profile Recurrent Training: User enters profile properties screen for the entry-level profile and increases Planned Shrinkage estimate to account for weekly recurrent training.
3. Work Queue AHT impact: User returns to Grid and observes AHT row for entry-level work queue. AHT is manually reduced based on an estimate of the effect of training on AHT.
4. Senior-Profile Mentoring: User enters profile properties for senior-level employees and increases Planned Shrinkage to account for weekly time spent conducting off-phone mentoring.
5. Training Corrections: User examines overall effect on staffing. The entry-level work queue staffing has improved significantly while the senior-level work queue staffing has suffered somewhat. User now corrects for this by lowering hiring plan numbers and increasing the transfer training number into the Senior Profile (skill mix). The net effect is fewer total hires in the hiring plan, increased efficiency of entry-level employees.

Outsourcing Scenario Evaluation

A significant driver in head count needs is peak demand. One approach that Strategic Planner can help evaluate is a peak-outsourcing model, in which peak demand is shunted to an outsourcer so that local head count can remain significantly smaller. Strategic Planner can help an individual determine just how

much of a difference this makes to local head count, and therefore what the right price is for the outsourcing service.

Procedure

1. User opens long term plan scenario as a new plan or in split screen mode for side-by-side comparison.
2. Volume and Peak reduction: User goes to volume editing process for the main-line work queue and reduces total monthly volume as well as peak value. User selects different distribution profile (more even?) or adjusts distribution profile by hand.
3. Hiring Changes: User observes immediate decrease in Staff Hrs. Need. Hiring plan is adjusted as well as training. Cost change is shown, and this can be used as a data point for the outsourcing decision.

Planning for Addition of a New Work Queue

An important planning step is the creation of a new work queue, hiring and training strategy for a new product in a skill-based environment.

Procedure

1. User launches Strategic Planner and opens nominal scenario.
2. New Work Queue Definition: User defines a new work queue, enters work queue name, type and service goals.
3. Forecast: User selects month in which volume begins and enters forecasts for the remaining months. User also specifies expected AHT across the board.
4. New Profiles Definition: User creates two new profiles- one is dedicated to the new work queue and the other is a profile for existing employees trained on the entry work queue who will be crossed over to the new work queue as well. Therefore, one profile will be hireable and the other will only have Xfer in. When the profiles are completely defined, they are empty (no hires or trainees) but ready to accept such. The new work queue shows zero Effective Staff Hrs and a number of Staff Hrs Need.
5. Training and Hiring Plan: User now creates monthly training transfers from original entry work queue to the new work queue, and seeds the new work queue with an initial training group the month before volume goes live. The cross-training pulls employee work off of the original work queues, and so appropriate hiring on the original side is also used to balance this effect. Finally, the user has created a whole new work queue and has modified the overall hiring and training plans based on the new demand created by the new work queue.

Calibration Technique Overview

A preliminary calibration of Strategic Planner ensures numerical accuracy of Strategic Planner with respect to the customer's operation. This process requires someone who can provide data to historical performance, staffing levels and volume and AHT statistics as well as some solid knowledge concerning the operation's scheduling practices and staff details such as shrinkage and work policies.

The primary goal of calibration is to identify the correct value for the Scheduling Efficiency parameter in Scenario Properties (i.e. Schedule Inflexibility for those with TCS background). The secondary goal of calibration is to identify approximate values for FTE hours, shrinkage and total paid staff hours in order to match customer expectations regarding actual work done by an FTE.

Begin calibration by concentrating on demand forecasting, using historical data and the customer's intuition to narrow in on the right value for Scheduling Efficiency. Once this is complete, then try to match the supply side (staffing levels and their resulting historical performance) by introducing a staffing profile and specifying the right hours per month and Shrinkage values.

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