Cisco Unified Workforce Optimization

Workforce Management Application User Guide Version 10.5

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Workforce Management Application User Guide

Contents

Introduction

The *Workforce Management Application User Guide* contains the information you need to successfully configure and use Workforce Management. The information here is specific to this product in the Unified Workforce Optimization suite.

General information that is common to all of the products in the Unified Workforce Optimization suite can be found in the *Unified Workforce Optimization Getting Started Guide*. This guide includes such information as:

- Accessing Unified Workforce Optimization
- Logging in
- Configuring your PC to run Unified Workforce Optimization
- Optimizing browser settings
- How to navigate the Unified Workforce Optimization interface

Dashboard

The Dashboard application is a common (multi-product) application that contains product-specific widgets. It is displayed by default when you log in.

The widgets that you see depends on which products you log in to, your role, and the dashboard view assigned to you by the administrator.

> **Example**: If you log in to two products as an agent, you will see the widgets for both those products that the administrator configured for the agent dashboard. If one of the products is down, the widgets associated with that product do not appear.

The dashboard displays all widgets in a continuous sequence, left to right and top to bottom. Blank spaces between widgets are not allowed.

If enabled by your administrator, you can click Settings to customize the layout and contents of your dashboard. You can:

- Select the widgets to display
- Rename widgets
- Configure widget settings
- Reposition the widgets in the dashboard

Changes made to the dashboard or widget settings are saved automatically and persist until they are changed by you or the administrator.

Besides the Settings button in the toolbar, administrators have access to a drop-down list box that contains a list of roles. The administrator selects the role whose dashboard view is to be configured.

Available Widgets by Role

The following list displays the widgets that are available to users according to their role. You might see all or a subset of these widgets in your dashboard, depending on how your administrator configured the dashboard for your role.

If you are logged into other products, you will see widgets for those products as well. Consult the user documentation for the other products for complete widget descriptions.

Available widgets per role

Widget	Agent	Supervisor	Scheduler
Agent Calls Per Hour	x	x	x
Agent Call Volumes	x	x	x
Agent Percentages	x	x	x
Agent Time Distributions	x	x	x
Agent Time Totals	x	x	x
My Schedule	x	x	x
Real Time Adherence		x	x
Service Queue Performance		x	x

Widget Toolbar

When you mouse over a widget toolbar, one or two buttons become visible. The following table describes these toolbar buttons.

Widget toolbar buttons

Button	Icon	Description
Action Link		Closes the current application and opens another application that displays information related to the widget.
Settings		Displays the configurable settings for this widget. When you apply changes to the settings, the changes persist each time you log in. Click the icon again to hide the settings.

Widget Descriptions

This section describes the widgets available in your dashboard.

Agent Calls per Hour Widget

The Agent Calls per Hour widget displays the average number of ACD calls per hour an agent handles over the selected date range. Data can be grouped by day or by month, for a range of 1–12 months. You can hover your mouse over a data point in the chart to display a screentip containing the exact value for the data point.

A call is counted in the schedule interval in which the agent answers it.

> **Example**: If an agent answers a call at 10:58 and completes the call at 11:03, that call is counted in the 10:00–10:59 schedule interval.

Agent Call Volumes Widget

The Agent Call Volumes widget displays an agent's call volumes for the selected date range. Data can be grouped by day or by month, for a range of 1–12 months. Hover your mouse over a data point in the chart to display a screentip containing the exact value for the data point.

You can choose to display either handled calls (the total number of ACD calls completed by the agent) or transferred calls (the total number of ACD calls transferred by the agent), or both.

> **Note:** A zero in the graph indicates the agent logged in during the day but took no calls. No data in the graph indicates that the agent did not log in on that specific day.

Agent Percentages Widget

The Agent Percentages widget displays your occupancy ratio or percentage of calls answered, or both, for the selected date range.

Data can be grouped by day or by month, for a range of 1–12 months. You can hover your mouse over a data point in the chart to display a screentip containing the exact value for the data point.

You can choose to display either or both of the following data elements in any order from the Settings window.

- % Occupancy—The percentage of in-session time that the agent spends in active contact handling states (for example, on incoming calls, in wrapup activity, on outbound calls).
- Utilization—The percentage of offered calls that the agent answered.

Agent Time Distributions Widget

The Agent Time Distributions widget displays the average time you spent in a specific ACD state for the selected date range.

Data can be grouped by day or by month, for a range of 1–12 months, and is expressed in seconds. You can hover your mouse over a data point in the chart to display a screentip containing the exact value for the data point.

You can choose to display up to three of the following data elements in any order.

Data Element	Description
Average Processing Time	The average amount of time an agent was in the Talking, On Hold, Work Ready, and Work Not Ready states
Average Talk Time	The average amount of time an agent was on incoming ACD calls, beginning when the call is answered until the call is disconnected, including hold time.
Average Hold Time	The average amount of time the agent placed calls on hold, including hold time for transfers and conferences.
Average After Call Work Time	The average amount of time an agent spent in the Work state immediately following an ACD call.
Average Ready Available Time	The average amount of time an agent was logged in and available to accept ACD calls.
Average Not Ready Time	The average amount of time an agent was logged in but not available to take ACD calls.

Agent Time Totals Widget

The Agent Time Totals widget displays the total time an agent spent in specific ACD states for the selected date range.

Data can be grouped by day or by month, for ranges between 1 and 12 months, and is presented in HH:MM:SS format. You can hover your mouse over a data point in the chart to display a screentip containing the exact value for the data point.

You can choose to display up to three of the following data elements in any order.

Data Element	Description
Total Processing Time	The total amount of time an agent was in the Talking, On Hold, Work Ready, and Work Not Ready states
Total Talk Time	The total amount of time an agent was on incoming ACD calls, beginning when the call is answered until the call is disconnected, including hold time.
Total Hold Time	The total amount of time the agent placed calls on hold, including hold time for transfers and conferences.
Total After Call Work Time	The total amount of time an agent spent in the Work state immediately following an ACD call.
Total Ready Available Time	The total amount of time an agent was logged in and available to accept ACD calls.
Total Not Ready Time	The total amount of time an agent was logged in but not available to take ACD calls.
Total In Service Time	The total amount of time an agent was either in a Ready state or was handling a call (total talk time plus total after contact work time). Default option for Series 1 in the Settings window.
Total Logged In Time	The total time during the period the agent was logged into the ACD. Default option for Series 2 in the Settings window.

My Schedule Widget

The My Schedule widget displays a summary of an agent's schedule for today. The widget shows the agent's last activity, current activity (marked with a red dot) and next three activities. If the schedule has more activities than that, the word "More" appears at the bottom of the widget.

The widget also shows the agent's current adherence (A) and conformance (C) percentages for the day. For information on how the adherence and conformance percentages are calculated, see Real Time Adherence Widget.

If the agent is not scheduled for any activities, My Schedule displays the message, "Nothing Scheduled On This Day".

You can view previous and future schedules one day at a time by clicking backward and forward through the calendar pages.

You can click the Link button  in the widget toolbar to open the My Schedule application and view today's schedule in full.

The activity start and end times shown are based on the Display Time Zone configured for the agent by the administrator, while the date is based on the WFM server's time zone. If the schedule crosses midnight, the start times for activities before midnight are highlighted. See Time Zone Considerations for more information on time zones.

Agents cannot modify the My Schedule widget. Supervisors can modify the widget by selecting the agent whose schedule is displayed in the widget and renaming the widget as desired.

Real Time Adherence Widget

The Real Time Adherence widget is available to supervisors, schedulers, and administrators only. It displays real time adherence data for selected agents. The data is updated every 30 seconds.

Columns in the widget can be resized by dragging the column header dividers to the left or right. The table rows can be sorted in ascending or descending order by clicking the column header.

You can click the Link button  in the widget toolbar to open the Agent Schedules application and view today's schedule in full.

You can choose to display selected agents and up to five of the following data elements in any order.

Data Element	Description
Adherence State	Displays a red dot if the agent is not in adherence, and a green dot if the agent is in adherence.
Schedule Activity	The agent's current scheduled activity. If the agent is not available, the field is blank.
Agent State	The agent's current ACD state.
% Adherence	The percentage of time that agents follow their schedules. When calculating adherence, WFM considers scheduled arrival and departure times, breaks, lunches, and time spent on scheduled activities, and compares the actual activity to the scheduled activity each millisecond through the work shift. Adherence is calculated according to the following formula: [(configured schedule adherence minutes – minutes not in adherence) ÷ configured schedule adherence minutes] × 100 Where "configured schedule adherence minutes" is the sum of time scheduled for activities the administrator has configured in the Application Management application's Calculate Adherence column as "Yes". **Note:** If the formula produces a negative value, the field displays a zero (0).

Data Element	Description
% Conformance	The percentage of time an agent works the right amount of time regardless of the time of day when the agent works. Schedule conformance does not take arrival and departure times into account. Schedule conformance is calculated according to the following formula: (Total time an agent is in a ready, talk, hold, or work state) ÷ (total scheduled in-service time) × 100 In service time does not include lunch, breaks, projects, or exceptions.
Reason Code	The reason code associated with the Logged Out and Not Ready state in the Scheduled Activity column.

Service Queue Performance Widget

The Service Queue Performance widget is available to supervisors, schedulers, and administrators only. It displays the real time service level performance for the selected service queue and optionally the goal (forecasted) service level performance as well. The data is updated every 30 minutes at 15 minutes past the hour and 45 minutes past the hour.

Data can be grouped by day or by interval, for ranges between 8 and 180 days.

The service level percentage is the percentage of actual calls answered for each interval within the service threshold time.

To compare the actual service level performance (%SVL-A) with the forecasted (goal) service level performance (%SVL-G), select Interval from the Group By drop-down list and then select the Goal check box in the Settings window.

Administrator Tasks

By default, a user's dashboard contains every widget available for their role. System administrators can customize dashboards by role by configuring which widgets appear, how they are named, what information they contain, and how that information is presented.

If users are already logged in when the system administrator customizes their dashboard, those users will not see any changes in their dashboard. They will continue to see the default dashboard for their role, or the dashboard they have customized for themselves.

If the system administrator customizes a dashboard for a role and then locks it down, users with that role will see the customized dashboard the next time they log in. The locked-down dashboard overrides default and user-defined dashboards, and individual users will no longer be able to change anything in their dashboard.

Configuring the Dashboard by Role

Prerequisite: You must log in using the username and password for the system administrator ID.

1. Select a role from the Role drop-down list in the Dashboard toolbar and then click Settings to display the Configure Dashboard Widgets window.
    a. Drag the widgets you want to appear on the dashboard from the Available Widgets list to the Selected Widgets list. To move widgets back to the Available Widgets list, select them and then click Delete Selected Widgets.
    b. If you want to rename a widget, double-click the widget in the Selected Widgets list and customize its name as desired.
    c. If you want to lock down the dashboard so that users cannot change it, select the Lock Down check box.
2. Click Apply to save your changes and close the Configure Dashboard Widgets window.
3. If desired, rearrange the order in which the widgets appear in the dashboard by dragging them into place. A Down Arrow appears when you drag the widget to a legitimate position.

    You can also arrange widgets in the Configure Dashboard Widgets window, but it is recommended you arrange them in the dashboard to show you what the users will actually see.

    You cannot drag a widget to an empty space.
4. Configure the settings for each individual widget as desired.

Agent, Supervisor, and Scheduler Tasks

The content of your dashboard depends on if the dashboard is unlocked, or if the administrator has configured the dashboard for your highest role and then locked it down.

Managing Your Unlocked Dashboard

If the administrator has not locked your dashboard, you are free to customize it as you desire. The changes you make override the default dashboard or the customized dashboard your administrator has configured for your role. Your customized dashboard will persist in future login sessions unless your administrator configures and then locks a dashboard for your role.

With an unlocked dashboard, you can do the following:

- Rearrange the widgets on your dashboard. Click the widget toolbar and drag the widget to a new location. A downward-pointing arrow appears when the widget is dragged to a legitimate location.
- Add or delete widgets from your dashboard. Click Settings on the dashboard toolbar to open the Configure Dashboard Widgets window, To add widgets, drag them from the Available Widgets list to the Selected Widgets list. To delete widgets, select them in the Selected Widgets list and click Delete Selected Widgets.
- Rename widgets. In the Configure Dashboard Widgets window, double-click the widget you want to rename, type the new name in the Rename Widget dialog box, and click Apply.
- Configure the content and appearance of widgets. Click Widget Configuration in the widget toolbar and set up the data and type of chart you want to see displayed in the widget. See for more information on what you can configure for individual widgets.

Managing Your Locked Dashboard

If the administrator has locked your dashboard, you can no longer change most features. The dashboard Settings icon is disabled.

When the dashboard is locked, you cannot do the following:

- Add or remove widgets from the dashboard.
- Reposition widgets in the dashboard.

- Rename widgets.
- Configure individual widgets to change the data and type of chart displayed.

Some users, depending on their role, are still able to select agents and services in certain widgets. In these widgets the Configure Widgets icon is present in the toolbar.

> **Example**: A supervisor can select an agent in the Agent Call Volumes widget. However, all other elements of the widget are locked down and cannot be changed.

If the widget does not include selections for agent or service, the Configure Widget icon is disabled in the widget toolbar.

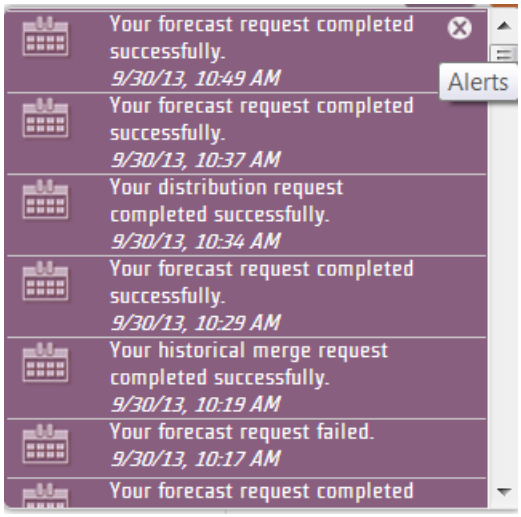
Application Management

The Application Management application is used by administrators to configure product features. If users have access to more than one product, all configurable features for the products are available through this application. Products must be running for the associated configurable features to be available.

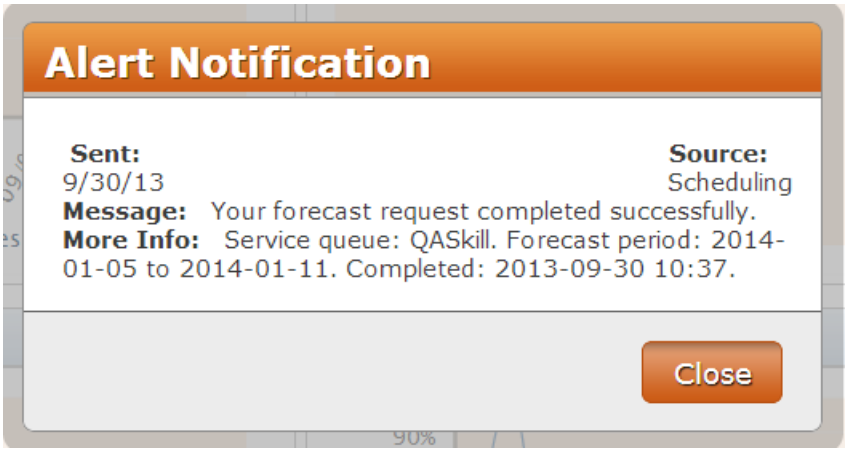
Alerts

WFM generates alerts to let you know the status of requests you run. The Alerts bubble at the upper right corner of the window contains a number that shows how many alerts are available for viewing.

When you hover your mouse over the Alerts bubble, the Alerts List is displayed.



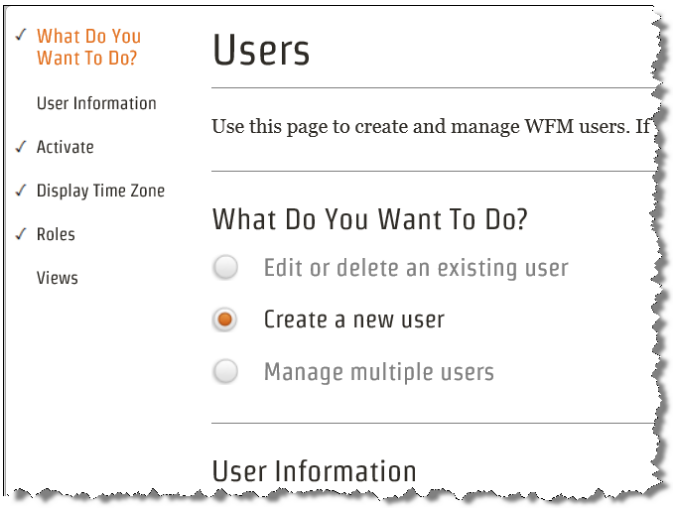
Click any of the listed alerts to display a popup containing a more detailed explanation of the event.



When you click Close, the popup closes and the alert disappears from the Alerts List, and the number displayed in the Alerts bubble is reduced by one. The only way to remove items from the Alerts List is to display and then close them one by one. The Alerts List will otherwise keep accumulating alerts .

Long View Navigation

The navigation pane at the left of any Application Management page is called the "long view".



Use the long view to help you move up and down on the page. A navigation link in the long view will turn bold orange when you select it, and that section of the page will jump to the top of the window.

Check marks next to each navigation link tell you if a section of the page has been completed or not. When all links are checked, you have provided all the information necessary to configure that record.

Synchronizing with the ACD

WFM can synchronize data with some ACDs (for example, Cisco Unified Contact Center Enterprise and Cisco Unified Contact Center Express). The Sync Service automatically extracts the following information from the ACD and loads it into WFM:

- Agents
- Main teams
- Relationships between agents and main teams
- Service queues

Once this information is extracted to WFM, you can then configure WFM to generate forecasts and schedules for service queues.

Note: Any teams, agents, relationships, or service queues you create in WFM are not synced back to the ACD. They are maintained only in WFM.

Synchronizing Agent Data

WFM assumes that every user imported from the ACD to WFM is an agent. As a result, it creates a user record and an agent record for each synced user and then links the two together.

Before you activate an agent in WFM, ensure that the user actually is an agent and not a supervisor or scheduler.

If the user is not an agent, you must create a new non-agent user manually in WFM and assign the appropriate role and view to that user.

When user data is changed in the ACD, the Sync service detects it and makes changes in WFM. The following table summarizes these changes.

Change in the ACD	Resulting Change in WFM
New agent is added	New agent is added. Specifically: • Applies the ACD agent first and last name to the WFM agent first and last name. • Applies the ACD login ID to the WFM Employee ID and ACD ID. You can change the Employee ID but not the ACD ID. Changing the Employee ID has no effect on the ACD login ID • Sets the WFM start dates for the company and department to the current date • Assigns the corresponding team to the agent as the agent's main team • Assigns the agent to the NewAgents team and the default team, if there is one New user is added. Specifically: • Applies the ACD agent first and last name to the WFM user first and last name • Creates a link between the user and the agent • Sets the status of the user to inactive
Agent first or last name is changed	Agent first or last name is changed
Agent is deleted	Agent and user status is set to Inactive

Synchronizing Team Data

When team data is changed in the ACD, the Sync service detects it and makes changes in WFM. the following table summarizes these changes.

Change in the ACD	Resulting Change in WFM
New team is added	New team is added with the same name Makes any agent who is a member of the team in the ACD a member of the team in WFM, and designates the team as the agent's main team
Team name is changed	Team name is changed
New agent is added to the team	New agent is added to the team, and the team is designated as that agent's main team
Team is changed	No change
Agent is removed from a team	No change

You can create teams in WFM and assign agents to these teams, but these new teams are not synchronized with the ACD.

In the ACD, an agent can belong to only one team. In WFM, an agent can belong to multiple teams. Assigning an agent to a team in WFM has no effect on the agent's team assignment in the ACD.

Synchronizing Service Queue Data

When service queue data is changed in the ACD, the Sync service detects it and makes changes in WFM. The following table summarizes these changes.

Change in the ACD	Resulting Change in WFM
New service queue is added	New service queue is added. Specifically: • Applies the ACD service queue name to the WFM service queue description • Applies the ACD service queue ID to the WFM service queue ID • The new service queue has a service queue type of Interactive/Voice New skill mapping is added. Specifically: • Applies the ACD service queue name to the WFM skill mapping name • Applies the ACD service queue ID to the WFM skill mapping number Creates a one-to-one mapping between the ACD skill mapping and the WFM skill mapping
Service queue name is changed	• Applies the new ACD service queue name to the WFM service queue description • Applies the new ACD service queue name to the WFM skill mapping name
Service queue is deleted	No change

Activities

The pages in this section of Application Management enable you to set up and manage exceptions and projects.

The pages are:

- Exceptions
- Exception Types
- Projects

Exceptions

Exceptions are activities that take agents away from being in service. Examples of exceptions are meetings, training, and time off.

Exceptions are assigned in any of three ways:

- Requested by agents via an Exception Request for both past and future dates. This type of exception must be approved by the agent's supervisor before it is applied to the schedule.
- Assigned to agents before a schedule is run by a supervisor or scheduler. When generating a schedule, WFM applies the exception to the agent's schedule and moves breaks to accommodate it. WFM also attempts to schedule another agent to work on that date to ensure that requirements are covered for the service queue.
- Assigned to agents after a schedule is run by a supervisor or scheduler after a schedule is run using the Agent Schedules page. Assigning exceptions post-production ensures that the schedule accurately reflects current conditions, and that a history of exceptions is saved

A list of agents assigned a specific exception is displayed on the exception's page.

When an exception is applied to a schedule, WFM modifies the exception to conform to these rules:

- An exception must appear within the agent's work shift.
- The maximum length of the exception is adjusted to the maximum availability of the agent if the duration of the exception is greater than the agent's availability.
- WFM ignores an exception that exceeds the time available.
- An exception is applied on the dates and times specified unless it occurs on a day the agent is not scheduled.
- The length of an exception that is shorter than the maximum number of work hours is deducted from the maximum number of work hours for the work shift. For example, if the work shift is a maximum of 8 hours and the exception for that day is 4 hours, the agent is scheduled for a maximum of 4 hours.

Managing Exceptions

The Exceptions page (Application Manager > Exceptions) allows you to create, edit, delete, and assign exceptions.

> **Best Practices**: It is recommended that you do not delete exceptions that are no longer used if they were previously assigned to agents. If they are deleted, the historical data associated with them will be lost. Deactivate the exceptions instead.

The fields on the page when you create, edit, or delete an exception are described below.

Field	Description
Exception Information	Enter a unique name for the exception. Maximum length is 50 characters.
Activate	Select the check box to activate the exception and make it available for use. If you clear the check box, the exception will no longer be available for use.
Paid	Select the check box if the activity is a paid activity. This setting can be overridden when the exception is assigned to an agent.
Hyperlink URL	If the agent should visit a web page to perform the exception activity, enter the URL of that web page here. You must use the full URL (including http, https, and www as needed). The URL appears in the exception in My Schedule.
Text to Display	Enter optional text that will appear as a hyperlink in the exception instead of the URL.
Color	Select a color to represent this exception in the schedule.
Agents Assigned to This Exception	To view a list of agents who have been assigned this exception, run the Assigned Exception report from the Reporting application.

The fields on the page when you assign an exception to agents are described below.

Field	Description
Exception	Select the exception you want to assign from the drop-down list.
This exception is a paid activity	By default this check box shows the paid status assigned to the exception. You can select or clear the check box to override that setting when assigning the exception.
Agents	Select the agents you want to assign the exception to. By default the available pane shows all agents; you can filter the agents by clicking the Show All button and selecting a team.
Dates	Enter the start date and end date of the exception activity. You can also enter a start date and then specify a number of occurrences for a recurring activity. If you enter a number of occurrences, the End Date field is disabled.
Duration	Enter a start and end time for the activity. WFM automatically calculates the length of time and shows it int the Hours field.
Frequency	Choose the frequency of the activity—day, week, month, or year.
Occurrence	Depending on your choice of frequency, this displays the options you can choose to set the daily, weekly, monthly, or yearly occurrence.

The following examples demonstrate how you can set the frequency and occurrence of daily, weekly, monthly, and yearly exceptions.

Example 1: To assign an exception that occurs only once, use these settings: Start Date and End Date— the same date; Frequency—Day; Daily Occurrence—Every 1 days.

Example 2: To assign an exception that occurs once a week on Monday for 10 weeks, use these settings: Start Date—date of the first Monday in the series; Number of Occurrences—10; Frequency—Week; Weekly Occurrence—Every 1 weeks, and then

select Monday from On These Days. Selected days are orange, non-selected days are white.

Example 3: To assign an exception that occurs once a month on the second Monday for 12 months, use these settings: Start Date—date of the first Monday in the series; Number of Occurrences—12; Frequency—Month; Monthly Occurrence—select the second option and complete the statement "The second Monday of every 1 months."

Example 4: To assign an exception that occurs once a year on January 15 for 5 years, use these settings: Start Date—the first January 15 in the series; Number of Occurrences—5; Frequency—Year; Yearly Occurrence—select the first option and complete the statement "Every January on this date: 15".

Exception Types

An exception type is a generic or high-level exception that agents select when requesting an exception.

If you think your agents will select an appropriate exception type when requesting time off, you can create exception types that are less generic. If you think your agents will not select an appropriate exception type, you can create a small number of very broad exception types and ask agents to include a descriptive comment when they request time off.

Example: An agent has a doctor's appointment, so when requesting time off, she selects the exception type "Sick Leave" and then types a comment indicating that the request is for a doctor's appointment. This exception type serves as a placeholder until the agent's supervisor approves the request. When approving the request, the supervisor enters the specific exception "Doctor's Appointment".

Managing Exception Types

Use the Exception Types page (Application Manager > Exception Types) to create, edit, and delete exception types.

The fields on the page are described below.

Field	Description
Exception Type Name	Enter a unique exception type name. Maximum length is 50 characters.

Projects

A project is an activity that prevents agents from responding to contacts. Projects are generally assigned to optimize the use of agent idle time when contact volume is low. These activities occur each work shift and can be assigned for one or more days per week.

WFM examines the coverage for every interval and schedules a project for a time when it has the least impact on coverage. If an agent is assigned multiple projects, WFM also looks at the priority assigned to each project and schedules the project with the highest priority first.

Example: You designate some of your agents to work on two projects and assign a priority to each project. If WFM generates the schedules for the two projects and discovers there are not enough agents to support all forecast requirements across both projects, it compares the priority value for the two projects. WFM then schedules agents for the project with the highest priority first.

Managing Projects

Use the Projects page (Application Manager > Projects) to create, edit, and delete projects.

Best Practices: It is recommended that you do not delete projects. If you delete a project, all the historical data associated with it is lost.

The fields on the page are described below.

Field	Description
Project Name	Enter a unique project name. Maximum length is 50 characters.
Priority	Enter a number from 0 to 9 to describe the project priority, with 0 being the highest priority.

Field	Description
Hyperlink URL	If the agent should visit a web page to perform the project, enter the URL of that web page here. You must use the full URL (including **http**, **https**, and **www** as needed). The URL appears in the project activity in My Schedule.
Text to Display	Enter optional text that will appear as a hyperlink in the project activity instead of the URL.
Paid	Select the check box if this project is a paid activity.
Activate	Select this check box to activate the project. A project cannot be scheduled until it is activated.
Start Date/End Date	Enter the start and end dates of the period agents can be scheduled to work on the project.
Start Time/End Time	Enter the start and end times of the period during which agents can be scheduled to work on the project.
Schedule Increment	Enter the schedule increment that determines the intervals in which the project can start. For example, if you choose an increment of 15 minutes and the start time is 08:00, then agents could start working on a project at 08:00, 08:15, 08:30, and so on.
Days Agents Can Work on the Project	Click the days on the bar to indicate which days of the week agents can be scheduled to work on the project. Selected days are orange. By default, every day of the week is selected.
Minimum Duration	Enter the minimum length of time that agents can be scheduled to work on the project. This value can not be less than the Duration Unit.
Maximum Duration	Enter the maximum length of time that agents can be scheduled to work on the project.

Field	Description
Duration Unit	Enter the basic block of time that agents are scheduled to work on the project. For example, if the duration unit is 30 minutes and an agent is scheduled to work on the project for 60 minutes during the work shift, that time could be two sequential duration units that totals 60 minutes, or one 30-minute duration unit in the morning and another 30-minute duration unit in the afternoon.
Limit the total number of hours spent on this project per week	Select the check box if you want to limit the total number of hours spent on the project per week. When the check box is selected more options appear: Maximum Hours per Week and how those hours are distributed on an agent's schedule.
Maximum Hours per Week	Enter the maximum number of hours per week an agent can work on this project, and select one of two options to indicate if the agent can work multiple days per week or only one day per week on the project.
Agents	Select the agents who are to work on the project.
Color	Select a color to represent this project in the schedule.

Historical Data

The pages in this section of Application Management enable you to capture, merge, and edit historical data.

The pages are:

- Historical Data Merge Request
- View and Edit Historical Data
- Capture Historical Data
- Forecast Accuracy Compilation Request

Capture Historical Data

Capturing historical data from your ACD might become necessary in certain circumstances. These include:

- You want to import historical data from your ACD for the period before you installed WFM.
- You want to fill in gaps in your historical data that occurred because of interruptions in the connection to your ACD after you installed WFM.

Capturing Historical Data

Use the Capture Historical Data page (Application Manager > Capture Historical Data) to run a request to capture historical data from your ACD and import it to WFM.

> **Best Practices**: Capturing data from the ACD can put a large load on the system. We recommend that if you are requesting a large amount of data, you run this request when the contact center is closed or during a quiet period.

The fields on the Capture Historical Data page are described below.

Field	Description
Start Date	Select the start date of the data you want to capture. The default value is the current date.
Start Time	Select the start time of the data you want to capture. The default value is the beginning of the current half-hour interval you are in.
End Date	Select the end date of the data you want to capture. The default value is today's date.
End Time	Select the end time of the data you want to capture. The default value is the end of the current half-hour interval you are in.

Historical Data Merge Request

Virtual service queues are composed of multiple service queues. Often those service queues were in existence before the virtual service queue was created, and as a result there is

historical data associated with each of them for that prior period. To build historical data for the virtual service queue, the historical data of each of its component service queues must be merged into the virtual service queue. The Historical Data Merge Request enables you to do this.

The historical data for the individual service queues is preserved, so if you delete a service queue from the virtual service queue, it is still available for use.

Generating a Historical Data Merge Request

To generate a historical data merge request (Application Manager > Historical Data Merge Request), follow these steps:

1. Enter a start date and end date for the period of historical data you want to merge.
2. Select the virtual service queue.
3. Schedule the request. By default the request runs immediately.

View and Edit Historical Data

WFM requires historical data to generate distributions, forecasts, and schedules and to calculate statistics. The more accurate the historical data is, the more accurate forecasts and schedules will be. However, sometimes historical data for a service queue is incomplete, inaccurate, or missing entirely. When this happens, you can enter the missing data manually or edit existing inaccurate data using the View and Edit Historical Data page.

Reasons you might want to edit or enter historical data include the following:

- To correct data that is inaccurate due to system or network issues
- To adjust data that is unusual due to an infrequent event, such as a marketing campaign
- To input missing data when contact volume is normal but no data was captured because the system or network was down
- To create data when historical data is either unavailable or missing, such as when you first install WFM
- To support forecasting and scheduling for non-interactive service queues (such as those that handle email and social media)

Note: The Generic Interface Services (GIS) API can also be used to add historical data from any ACD to the WFM database. The GIS API is part of WFM and requires no

separate installation or executable to function. See the *GIS API Reference Guide* for more information.

Viewing and Editing Your Historical Data

Use the View and Edit Historical Data page (Application Manager > View and Edit Historical Data) to display the historical data for a specific service queue and date.

Once you have completed the historical data parameters a table is displayed with the requested data, if any exists. If none exists for a service queue, you can enter data for that service queue and a specific day at the Interval zoom level.

You can copy and paste data in the table using standard Windows shortcut keys.

- Click and drag with your mouse to select specific rows and columns in the table, or Ctrl + A to select the entire table.
- Use Ctrl + C to copy the selected cells to the clipboard in TSV (tab separated value) format. This action copies both editable and read-only columns. You can also right-click on your selection, and choose Copy or Copy with Headers.
- Use Ctrl + V to paste the contents of the clipboard into table cells. The data you are pasting can be in TSV or CSV format. You can also right-click and choose Paste. You can paste into a specifically chosen group of cells, or just select the cell that becomes the upper left corner of your pasted data. The data is pasted into the selected cells, unless the selected column is read-only. You cannot paste copied data into read-only columns. If the copied data is too big to fit into the selected paste area, the data outside the selected area is ignored. For example, if you copy three columns and try to paste it into an area that is two columns wide, the third column is ignored.

The fields on the View and Edit Historical Data page are described below.

Field	Description
Service Queue	Select the service queue whose data you want to view and/or edit.

Field	Description
Zoom Level	Select the level of detail you want to use to view the data. Your choices are: ■ I (by interval) ■ D (by day) ■ W (by week) ■ M (by month) ■ Y (by year) Data can be edited only at the Interval zoom level.
Date	Appears only when the Interval zoom level is selected. Enter the date whose data you want to view or edit.
Start Date/End Date	Appears only when the Day, Week, Month, or Year zoom level is selected. Enter the start and end date of the period whose data you want to view.

The fields in the historical data table are described below. The table shows the definition of the field for both interactive (I) service queues and non-interactive (NI) service queues.

For more information on interactive and non-interactive service queues, see Service Queue Types.

Field	Description
Contacts Handled	The number of ACD calls/contacts the agents completed during the interval.
Contacts Abandoned	The number of ACD calls routed to the service queue during the interval that were abandoned (the caller hung up while in queue or while ringing at the agent's phone). Calls are counted for the interval when the caller hangs up.
Contacts Answered	The number of ACD calls/contacts answered in the service queue during the interval. Calls are counted in the interval in which the agent answered them.

Field	Description
Total Answer Time	The amount of time that all calls/contacts were in the queue and answered in the interval.
Average Talk Time	**I**: The average amount of time spent talking and on hold for all calls handled in the interval. **NI**: The average amount of time spent working on each contact for all contacts handled in the interval.
Average Work Time	Average amount of after contact work for each contact for all contacts handled in the interval.
Service Level Percentage	The percentage of contacts that met the service level objective for the interval.

Forecast Accuracy Compilation Request

Forecast accuracy is the ratio of the forecasted contact volume to the actual contact volume. The Forecast Accuracy Compilation request calculates this ratio for one or more service queues based on historical data. It cannot tell you how accurate a forecast will be in the future, it can only evaluate the accuracy of forecasts in the past.

> **Example**: If the forecast precision level percentage for a service queue is 105%, it means that the forecasted contact volume was 5% greater than the actual contact volume.

The value calculated by this request is displayed on the Service Queues page in the Forecast Precision Level Percentage section.

Generating a Forecast Accuracy Compilation Request

To generate a forecast accuracy compilation request (Application Manager > Forecast Accuracy Compilation Request), follow these steps:

1. Enter a start date and end date for the period whose forecast accuracy you want to calculate.
2. Select one or more service queues. Each service queue must have forecasts gen-

erated for them for the selected date range.

3. Schedule the request. By default the request runs immediately.

People

The pages in this section of Application Management enable you to configure users, agents, team, and views to set up agent access to WFM.

The pages are:

- Users
- Agents
- Teams
- Views

Users

A user is someone who has a role within WFM. In systems that do not sync with an ACD, users are created, edited, and deleted from within WFM.

In systems that sync with an ACD, users are created and managed in the ACD, although you can still create users in WFM. When users are synced from the ACD, both a user record and an agent record are created and the user record is automatically linked to the corresponding agent record. You cannot change these settings.

> **Note**: In synced systems, users created in WFM are not synced back to the ACD.

A user must have at least one role within WFM. The roles you can assign are agent, supervisor, and scheduler. There is no assignable administrator role, there is only the built-in system administrator. For more information on the administrator role, see About the Administrator Role.

Managing Users

Use the Users page (Application Manager > Users) to create, edit, and delete users. You can edit and delete users one at a time or many at a time.

If you choose to manage multiple users, you can perform three different actions:

- Activate or deactivate them
- Assign roles to them
- Delete them

Note: It is recommended that in synced systems you create users in the ACD. You can create a user in WFM, but that user cannot be an agent (you cannot link the user record to an agent record), only a supervisor or scheduler.

Note: In synced systems, if you want to delete a user record, you must delete it first in the ACD and then in WFM. The Sync service does not delete users from WFM when they are deleted in the ACD, so it must be done manually.

Best Practices: It is recommended that you do not delete users from WFM. If they are deleted, then you lose the link between the agent record and the user record.

The fields on the Users page are described below.

Field	Description
First Name	The user's first name.
Last Name	The user's last name.
Username	The WFM user name. In an Active Directory environment, this is the user's AD username and cannot be edited.
Password/Confirm Password	Create or reset the user's password here. In an Active Directory environment, these fields are not displayed because the user's Active Directory password is used. The password is administered in AD.
Active this user	Select this check box to activate the user. The user cannot log in unless the user account is activated.
Creation Date	(Read only) The date the user record was created.

Field	Description
Deactivation Date	(Read only) The date the user record was deactivated. As long as a record is activated, this field is not visible. When visible, it displays the date of the most recent deactivation.
Display Time Zone	Select the time zone the user's schedules are displayed in. By default this is the time zone configured on the Global Settings page.
Roles	Select one or more role for this user. In a synced system, the user is automatically assigned the agent role. **Note**: If a user is an active agent and is then assigned an additional role (for example, is promoted to supervisor), and that user is no longer required to work as an agent, you should deactivate the user's agent record and also unassign the user's agent role. Otherwise WFM might not function correctly.
Link this user to an agent/Select Agent	Select the check box and then select an agent from the Select Agent drop-down list. In synced systems, the check box is selected and read only, and the agent created at the same time as the user record is linked to the record. **Note**: In a synced system, this check box and field are not visible if you are creating a user within WFM.
Views	Select the views for the user. You must select at least one view, and one of the selected views must be designated as the Main View. The Main View designation affects the access the user has. If a view is designated as a user's Main View, then that user has read-write access to schedules in the Agent Schedules application. Also, if an agent's Main Team is part of a supervisor's Main View, then the supervisor has access to that agent's requests in the Messaging application.

Field	Description
Action	If you choose to manage multiple users, the Action section appears. Select the action you want to take from the Action drop-down field and then select the desired users in the selection pane.

About the Administrator Role

WFM comes with a system administrator user ID. The password for this user ID (administrator) is initially set during installation in the WFM Configuration Setup utility, and maintained in WFM (via the Users page for the administrator user).

You cannot assign the administrator role to any other user in WFM. "Administrator" is not an option in the list of roles available when configuring users.

However, it is possible to have multiple WFM administrators.

- In systems that use Active Directory to administer user IDs and passwords, you can configure Active Directory users to be WFM administrators by assigning them to a specific user group within Active Directory. The name of this group is entered in the WFM Configuration Setup utility (WFM Authentication step) when adding the connection information for Active Directory. WFM treats any users who are members of this group as WFM administrators.
- In systems that do not use Active Directory, the only way to have multiple administrators is to allow people to share the administrator user ID and password.

Agents

In a synced system, agents are automatically created when the ACD is synced to WFM. As a result, in these types of systems you cannot create agents in WFM. You can, however, edit the agent records with the exception of a few fields that are configured in the ACD. These read-only fields are the following:

- First Name
- Last Name
- ACD ID

In a non-synced system, you can create, edit, and delete agents without restriction. However, the agents you create in WFM must have the same names and IDs as are set up for them in

your ACD. This enables WFM to associate the historical data imported from the ACD into WFM with the correct agent.

Managing Agents

Use the Agents page (Application Manager > Agents) to create, edit, and delete agents in a non-synced system or to edit and delete agents in a synced system.

Note: An agent must be inactive before the agent can be deleted.

Best Practices: It is recommended that you do not delete agents. If you delete an agent, all the historical data associated with the agent is lost.

The fields on the Agents page are described below.

Field	Description
First Name	The agent's first name. In synced systems, this value comes from the ACD and is read only.
Last Name	The agent's last name. In synced systems, this value comes from the ACD and is read only.
Employee ID	The agent's ID within WFM. This value must be unique.
User Name	The agent's WFM user name as configured on the Users record linked to this agent record. In an Active Directory system, this is the agent's AD username.
ACD ID	The agent's ID as assigned in the ACD. This number is used to connect synced agent records between the ACD and WFM, and WFM uses this number to identify the agent. In synced systems this value comes from the ACD and is read only.
Company Start Date	Enter the date the agent started employment with the company. WFM uses this value to define scheduling priorities.

Field	Description
Company End Date	(Optional) Enter the date the agent will end employment with the company. The agent will not be scheduled after this date. Use this field when you know the agent's termination date.
Department Start Date	Enter the date the agent started working in the contact center. WFM uses this value to define scheduling priorities.
Rank	(Optional) Enter an alphanumeric value used to rank agents based on their seniority and expertise. WFM uses this value to define scheduling priorities. The exact meaning of rank depends on the service that your contact center provides.
Activate this agent	Select this check box to activate the agent in WFM. Agents must be activated in order to be scheduled.
Teams	Assign the agent to one or more teams, and designate one team as the agent's Main Team. The Main Team determines which statistics and messages the agents sees on the dashboard. By default the agent is assigned to the NewAgents team.
Skill Mappings	Assign the agent to one or more skill mappings. The skill mappings you choose determine which service queues the agent can be scheduled for. Both the agent and the service queue must be assigned to the same skill mapping in order for the agent to be scheduled for that service queue.

Field	Description
Work Shifts	Assign work shift rotations to the agent. When creating a work shift rotation, the first work shift moved to the Assigned pane is dated with the start date of the current week. Every subsequent work shift assigned is dated with the next week's date. There can be no gap in weeks from one work shift to the next. **Note**: If automatic work shift rotation is not enabled when running a schedule, there must be a work shift configured for the specific week of the schedule in order for this agent to be scheduled. Use the up and down arrows to reorder the work shifts in the rotation. The work shifts move up and down by half steps—one click up and the selected work shift is concurrent with the work shift above, becoming a split shift. Click again and the work shift moves to the week before the work shift above, and assumes that work shift's date; and all work shifts below redate themselves accordingly. The same goes for using the down arrow. See this example of work shift rotations for more information.
Copy Work Shift Rotations	You can copy this agent's work shift rotation to one or more selected agents. This will replace those agents' previous work shift rotations. You must first save this agent record before you can perform the copy.
Assigned Exceptions	This table displays all exceptions assigned to the agent. By default the table is sorted by date in descending order, so the most current date is at the top. The table can be sorted on any column. You can delete exceptions from the table by selecting the check box next to the exception and clicking Delete. The Delete button is not enabled until at least one exception is selected.

Example: Work Shift Rotation

The following table shows what happens when you move work shifts up and down in the Work Shifts section's Assigned pane on the Agents page.

Action	Effect on Shift Rotation	Comment
Select Shift 3	Week A | Shift 1 Week B | Shift 2 **Week C | Shift 3** Week D | Shift 4	
Click Up	Week A | Shift 1 Week B | Shift 2 **Week B | Shift 3** Week D | Shift 4	Shifts 2 and 3 are now split shifts for Week B
Click Up	Week A | Shift 1 **Week B | Shift 3** Week B | Shift 3 Week D | Shift 4	Week B no longer has a split shift
Click Up	**Week A | Shift 3** Week A | Shift 1 Week B | Shift 2 Week D | Shift 4	Shifts 3 and 1 are now split shifts for Week A
Click Up	**Week A | Shift 3** Week B | Shift 1 Week C | Shift 2 Week D | Shift 4	Shift 3 is now first in the rotation and all other shifts have moved down one week

Note: A split work shift is a situation where an agent works two different shifts during the same day. Before you split a work shift, you must create two work shifts that start and end at different times or days, and that do not overlap.

Example: If an agent works four hours in the morning and four hours in the evening, you must create one work shift that covers the morning hours and another work shift that covers the evening hours.

Teams

In a synced system, some teams are created in the ACD and synced to WFM. These teams have agents assigned to them in the ACD, where they are designated those agents' Main Team. For these teams, you cannot change the team name, the agents assigned to the team, or the team's status as those agents' Main Team.

However, you can create and manage teams in WFM. These teams are not synced back to the ACD.

In a non-synced system, you can create and manage teams as desired.

Managing Teams

Use the Teams page (Application Manager > Teams) to create, edit, and delete teams.

Best Practices: It is recommended that you do not delete teams. If you delete a team, all the historical data associated with the team is lost.

The fields on the Teams page are described below.

Field	Description
Team Name	Enter a unique name for the team. In a synced system, the team name is read only.

Field	Description
Agents	Assign the desired agents to the team, and for each agent, if this is that agent's Main Team, select the Main Team check box. If this is the Main Team for all selected agents, you can select the check box next to the column header to select every check box in the list. In a synced system, you cannot change the list of agents assigned to the team.
Include this team in productivity reports	Select this check box if you want this team's statistics to be included when the Capture service compiles all daily, weekly, monthly, and yearly productivity statistics.

Views

A view controls the scope of access a user has in WFM. A user assigned to a view has access only to the entities (teams, service queues, service queue groups, skill mappings, work conditions, work shifts, exceptions, and projects) assigned to that view according to the privileges of their role.

A WFM entity can be included in multiple views, and a user can be assigned to multiple views.

The WFM system view is called EnterpriseView. This view cannot be renamed or deleted. You can use this as your primary view or create new views to suit your needs.

Managing Views

Use the Views page (Application Manager > Views) to create, edit, and delete views.

The fields on the Views page are described below.

Field	Description
View Name	Enter a unique name for the view. **Note**: EnterpriseView is a system view and cannot be renamed or deleted.

Field	Description
Activate this view	Select this check box to activate the view. A view cannot be used until it is activated.
Users	Select the users to assign to the view.
Teams	Select the teams to assign to the view.
Service Queues	Select the service queues to assign to the view.
Service Queue Groups	Select the service queue groups to assign to the view.
Skill Mappings	Select the skill mappings to assign to the view.
Work Conditions	Select the work conditions to assign to the view.
Work Shifts	Select the work shifts to assign to the view.
Exceptions	Select the exceptions to assign to the view.
Projects	Select the projects to assign to the view.

Schedules

The pages in this section of Application Management enable you to set up all the elements required to generate a schedule.

The pages are:

- Work Shifts
- Work Conditions
- Special Events
- Shrinkage
- Shift Budget Analysis Request

Work Shifts

WFM allows you to create work shifts that match agents' availability, preferred days off, start time, and length of work day. A work shift identifies the hours and days when an agent can work. You can create a work shift for one or more agents. WFM will then schedule agents to best match their work shift preferences and business requirements. There is no limit to the number of work shifts you can create, and WFM retains the previous schedule history for each agent in the WFM database.

When configuring a work shift you need to determine whether the work shift is variable or fixed. You can assign agents and work conditions to a work shift for specific weeks. WFM allows you to manage the following work shift types.

- Fixed work shift
- Assignment work shift
- Variable work shift

You can create multiple work shifts and then assign them to an agent's work shift rotation. If you use work shift rotations (an agent works different shifts over several weeks) you must define the shift and rotation sequence. See Managing Agents and Example: Work Shift Rotation for more information.

Agents can trade work shifts. These trades must approved by supervisors, schedulers, or administrators.

Supervisors, schedulers, and administrators can also perform ad hoc schedule trades based on business requirements and the needs of the contact center.

Fixed Work Shifts

A fixed work shift is a work shift that covers requirements for fixed hours and days and never varies. Use this type of work shift to schedule agents for to support requirements for entire days or weeks.

A fixed work shift has the following characteristics:

- Work days during the week are fixed
- Hours worked each day are fixed, but do not have to be the same for each day
- The shift start time each day is fixed, but does not have to be the same for each day

- The number of hours per week specified for the work shift (Hours per Week) must equal the total number of hours scheduled for the days of the week in the work shift (Total Hours)

If you assign a fixed work shift to an agent, the agent's schedule never changes. If you assign fixed work shifts to all agents, you cannot optimize schedules to ensure adequate coverage at all times.

Assignment Work Shifts

An assignment work shift is a type of fixed work shift that does not cover requirements. Use an assignment work shift to schedule agents for out of service activities for entire days or weeks.

Variable Work Shifts

A variable work shift is a work shift that covers requirements for variable hours and days. Use this type of work shift to schedule agents to support a service queue for variable days and weeks. In contrast to a fixed work shift, a variable work shift offers flexibility in at least one of the following ways:

- You can assign at least one day a week as an optional work day.
- You can assign the total work hours for one or more days per week as variable.
- You can assign the arrival time for at least one day a week as variable.

One or more of the following characteristics are different in a variable work shift:

Minimum and Maximum Days per Week and Hours per Day

With a variable work shift, you might want to limit the maximum number of days and hours per week to limit overtime and guarantee a reasonably rested employee. You might also need to commit a minimum number of hours per day and days per week for the agent. You specify the minimum and maximum number of days per week and hours per week for the work shift. Then you specify the minimum and maximum number of hours for each day of the week that the agent can work for the day. You might also specify the days of the week that are potential days off for the agent.

Earliest and Latest Start Times

Determine the earliest time you might want the agent to start work and when the agent can start work. Once you know the earliest and latest possible start times, you configure the earliest and latest start times for an agent in WFM for each day in a work shift.

Optimization

The Optimization feature determines how WFM schedules agents with variable work shifts. This feature has no effect on agents with fixed or assignment work shifts.

You must select one of the following optimization options:

- Optimum: WFM schedules all agents with fixed work shifts first. Then it schedules the remaining available agents to best meet the forecast requirements throughout the remainder of the day. Choose Optimum if you want to schedule agents according to the contact center's requirements and not necessarily according to agent preferences. Optimum scheduling generates the best service levels and is generally preferred by contact center management.
- Multilinear: WFM schedules all agents with fixed work shifts first. Then it examines requirements starting at the beginning of the day to identify any requirements not already covered by agents with fixed work shifts. If an agent with a variable work shift is available and a requirement exists for an agent, WFM schedules the agent without considering if there might be a greater need for an agent later in the day. Multilinear scheduling results in more consistent arrival times for agents and is generally preferred by agents.

Managing Work Shifts

The Work Shifts page (Application Manager > Work Shifts) allows you to create, edit, delete, and assign work shifts.

The fields on the page when you create, edit, or delete a work shift are described below.

Field	Description
Work Shift Name	Enter a unique name for the work shift.
Activate	Select this check box to activate the work shift. It must be activated in order for it to be available for use. **Note**: When you deactivate a work shift, it no longer appears on agent schedules.

Field	Description
Work Shift Type	Select the type of work shift this is. ■ Fixed: Used to cover requirements for fixed hours and days. This work shift never varies. ■ Assignment: Used for agent activities when agents are not in service. This is a type of fixed work shift. ■ Variable: Used to cover requirements for variable hours and days. This work shift varies from day to day.
Weekly Occurrence	(Variable work shifts only) Enter the minimum and maximum number of hours and days per week an agent can be scheduled.

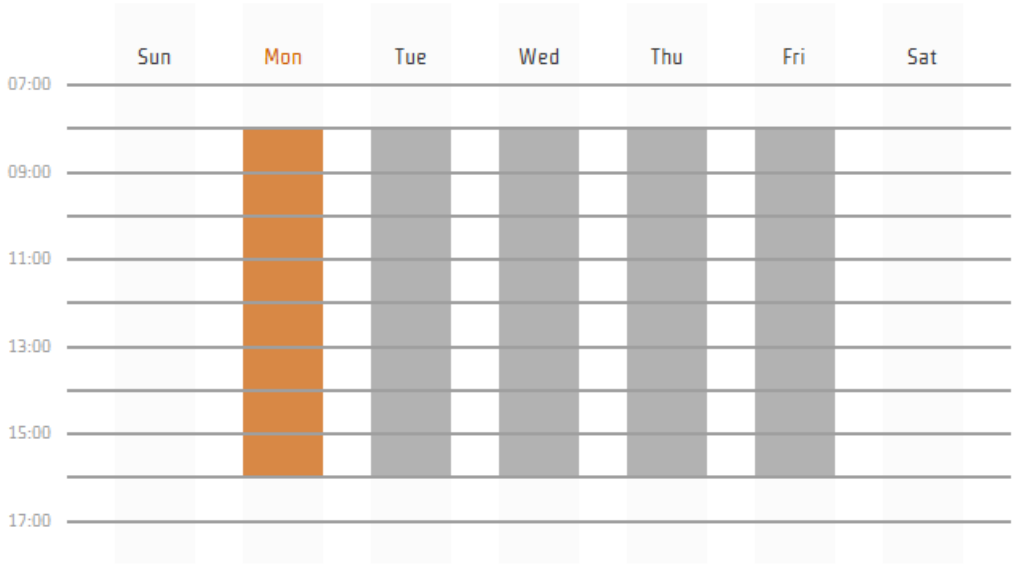
Field	Description
Shift Parameters	The shift parameters depend on the type of work shift you selected. As you enter parameters for each day of the week, they are displayed graphically in the work shift parameter graph. Fixed and Assignment Work Shifts: • Apply To: Select a day from the day bar to configure the parameters for that day. • Shift Start: Enter the time the shift starts. • Shift Length: Enter the length of the shift. • Days Per Week: This value is calculated based on the number of days you configure. • Hours Per Week: This value is calculated based on the number of days you configure and the shift length each day. Variable Work Shifts: • Apply To: Select a day from the day bar to configure the parameters for that day. • Shift Start: Enter the earliest and the latest times that the agent's shift can start for that day. • Shift Length: Enter the minimum and maximum shift length for that day. • Minimum Interval: Enter the minimum amount of time between work shifts. • Days Off Allowed. Select this check box if the agent can have this day off. If cleared, the agent will be required to work this day if there are hours available.
Schedule Increment	(Variable work shifts only) Select the desired interval for the work shift. The default value is 30 minutes.

Field	Description
Optimization	(Variable work shifts only) Choose which method of optimization will be used in scheduling. The default is Optimum. See Variable Work Shifts for more information about optimization methods.
Work Conditions	Select the work conditions that apply to the work shift.

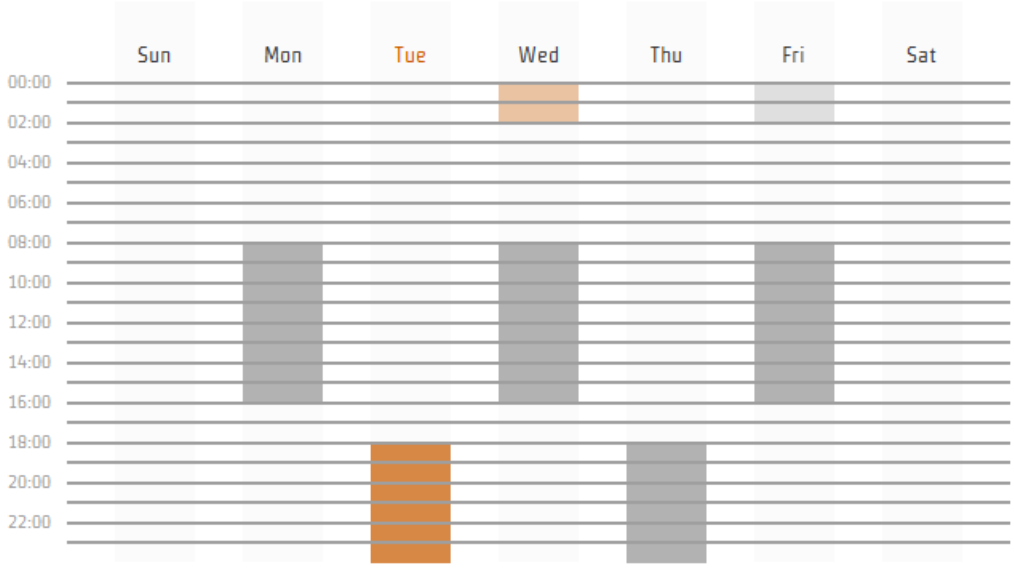
Understanding the Work Shift Parameter Graph

The work shift parameter graph is a visual representation of the work shift you are configuring. It displays a bar for every day you set up, showing the start times and durations. For fixed and assignment work shifts the graph shows a gray bar for each scheduled day of the week. The selected day is shown in orange.

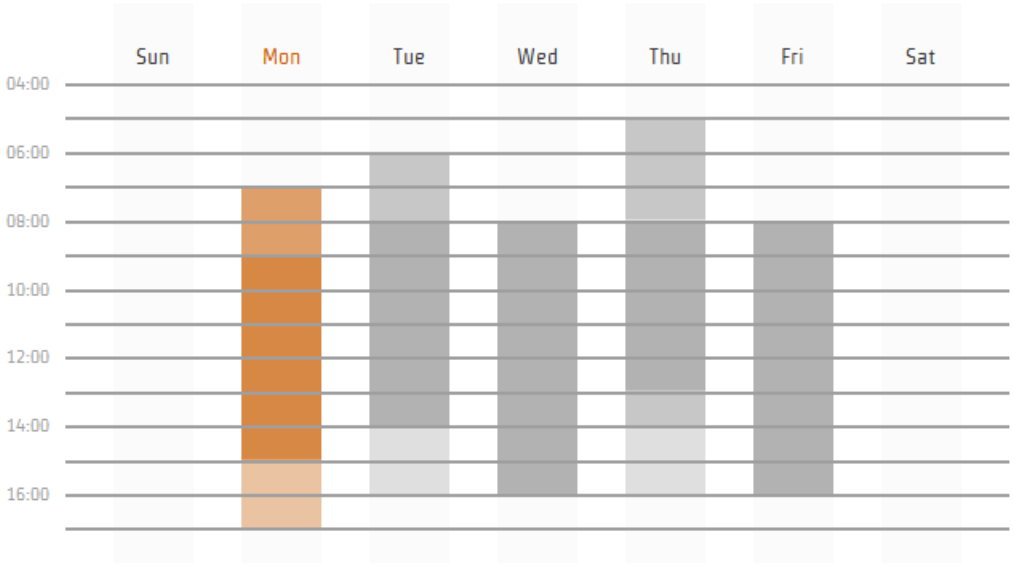
The following graph shows a fixed shift that starts at 08:00 Monday through Friday and has a duration of 8 hours daily.



The following graph also shows a fixed work shift, but it includes two days on which the scheduled work shift crosses midnight. On Tuesday and Thursday, work starts at 18:00 and ends at 02:00 the next morning. This is shown visually by having the bar for Tuesday (the day is selected in the day bar so it shows as orange in the graph) continue into Wednesday.



The following graph shows a variable work shift. The core hours the agent works each day are shown in dark gray or orange. The variable start times and shift duration are indicated by lighter gray or orange. For example, on Monday, the agent can start work from 07:00 to 09:00, and the shift duration is between 6 and 8 hours long. The dark orange indicates that no matter when the agent starts or how long the shift is, the agent is in the contact center from 09:00 to 15:00



Work Conditions

WFM differentiates between routine and non-routine activities. It categorizes activities that occur during every work shift (such as breaks and lunches) as routine. These routine activities are called work conditions. A work condition is a set of rules used to identify a routine activity that prevents the agent from answering contacts.

A work condition might be linked to fixed or variable work shifts. If the agent can work 4.5 to 6 hours during a work shift and scheduling is in half hour increments, you must configure work conditions for 4.5, 5, 5.5, and 6 hours and assign them to the agent's work shift.

> **Note**: If you do not assign any work conditions, WFM creates agent schedules with no breaks or lunches.

For each work condition, you must specify the following information:

- Name of the work condition
- Duration of the work condition
- The minimum delay between the start of the work shift and the start of this work condition. For example, if the work shift starts at 08:00 and this work condition cannot start any earlier than 09:00, the minimum delay must be 1:00.
- The maximum delay between the start of the work shift and the start of this work condition. For example, if the work shift starts at 08:00 and this work condition cannot start any later than 09:20, the maximum delay must be 1:20.
- The minimum interval between the end of the previous work condition and the start of this work condition. For example, if the previous work condition is a 15-minute break, and this work condition is a one-hour lunch, and there must be at least an hour and a half between the break and the lunch, the minimum interval must be 90 minutes.
- The increment in minutes that WFM uses to schedule the work condition. Possible values are 00:05, 00:10, 00:15, 00:20, and 00:30.
- The portion that is paid. For example, you can indicate that 15-minute breaks are paid and that one-hour lunches are unpaid.

Note that when creating schedules, WFM allocates time for the longest work condition first. For example, if your work conditions are 15-minute breaks and one-hour lunches, WFM schedules the one-hour lunches first. When you create work conditions for lunch and breaks, configure the minimum delay, maximum delay, and minimum interval so that conflicts are avoided. If you

do not configure these three parameters correctly, WFM might create a schedule that does not satisfy all of the constraints.

One way to avoid scheduling conflicts is to use the following parameter assignments:

- Morning break minimum delay = lunch minimum delay – lunch minimum interval – morning break duration
- Lunch minimum delay = morning break maximum delay + morning break duration + morning break minimum interval

To illustrate these guidelines, consider the following scenario. A contact center has created three work conditions: Morning Break, Lunch, and Afternoon Break. Work shifts are eight hours long. The start and end times of work shifts are variable: start times can be as early as 07:30 and end times as late as 17:30.

The work conditions are configured as follows.

Activity	Min Delay	Max Delay	Duration	Min Interval
Morning Break	1:30	3:00	15	0
Lunch	3:00	5:00	30	90
Afternoon Break	5:30	6:45	15	90

If an agent's work shift begins at 08:00, then that agent's morning break can start any time between 09:30 and 11:00. The agent's lunch can start any time between 11:00 and 13:00. The agent's afternoon break can start any time between 13:30 and 14:45.

For example, assume that to handle predicted call volume, WFM must schedule an agent to begin work at 08:00 and to take a lunch break from 11:00 to 11:30. WFM then schedules the agent’s morning break from 09:30 to 09:45 to satisfy the minimum delay of 1:30 for that work condition.

However, that would leave only 11:00 minus 9:45, or 1:15, between the end of the morning break and the start of the lunch break. WFM cannot create a schedule that satisfies all of the parameters as configured. This situation can be corrected by decreasing the minimum delay of the morning break from 1:30 to 1:15.

As another example, assume that to handle predicted call volume, WFM must schedule an agent to begin work at 08:00, take a lunch break from 13:00 to 13:30, and a morning break from 09:30 to 09:45. WFM then schedules the agent’s afternoon break. Since the agent’s lunch

break ends at 13:30, the afternoon break cannot begin until 15:00 (90 minutes later). However, the maximum delay for the afternoon break is 6:45, which means the afternoon break must begin by 08:00 plus 6:45, which is 14:45. WFM cannot create a schedule that satisfies all of the parameters as configured. This situation can be corrected by increasing the maximum delay of the afternoon break from 6:45 to 7:00.

The revised work conditions are as follows.

Activity	Min Delay	Max Delay	Duration	Min Interval
Morning Break	1:15	3:00	15	0
Lunch	3:00	5:00	30	90
Afternoon Break	5:30	7:00	15	90

Managing Work Conditions

Use the Work Conditions page (Application Manager > Work Conditions) to create, edit, and delete work conditions.

The fields on the Work Conditions page are described below.

Field	Description
Work Condition Name	Enter a name for the work condition that makes it easy to identify when assigning the work condition to agents, for example, Customer Service - 4.5 hours.
Scheduled Shift Length	Select the length of the work shift that the work condition applies to.
This is a general condition	Select this check box if this work condition applies to every work shift with the same number of hours of work per day, and if no other work condition is associated with those work shifts. If you do not select the check box for this work condition and no other work condition is linked to a work shift, WFM will not schedule breaks or lunches to agents assigned to this work shift.

Field	Description
Earliest Shift Arrival Time	Select the check box if you want the work condition to apply to work shifts with any arrival time, or specify a time if you want the work condition to apply to work shifts that begin at or later than a specific arrival time. These options are mutually exclusive, you can select only one of them.
Days to Include	Select at least one day of the week that the work condition applies to. By default they are all selected.

Field	Description
Activities	Click Add to add a row to the Activities table, and then specify the details of the activity. These include: • Name: Enter a name to describe the break or lunch. If you leave this field empty, WFM fills it with Break or Lunch, depending on your choice in the Type field. • Type: Select Break or Lunch from the drop-down list. • Min Delay: Enter the minimum amount of time in hh:mm format that must elapse between the shift arrival time and the start of this activity. • Max Delay: Enter the maximum amount of time in hh:mm format that can elapse between the shift arrival time and the start of this activity. • Duration: Enter the length of time the activity lasts in hh:mm format. • Increment: Select the increment during an hour when the activity can begin. For example, if the activity can start one hour after the shift start of 08:00 and you choose the 15-minute increment, the activity might start at 09:15, 09:30, or 09:45. • Min Interval: Enter the minimum amount of time between activities. • Paid Portion: The portion of the activity in hh:mm format that is paid. • Color/Color ID: Click the color field to select a color to represent this activity in the schedule. The color ID is the hex code for the selected color.

Field	Description
Assign Work Shifts	Assign one or more work shifts that will use this work condition. **Note**: If all the work conditions in your contact center are general work conditions, you do not need to assign work shifts with them.

Special Events

A special event is a type of event that causes contact volume to deviate from normal. The special event can cause volume to either increase or decrease. When you assign a special event to a service queue, WFM makes adjustments for the effect of the special event when generating distributions and forecasts.

When examining a historical special event, consider the following:

- Which service queue does the special event affect? A special event is always related to a service queue.
- What type of event is this special event? You can configure generic types of special events with default values. Once you create a generic special event, you can select it from a list of available special event types whenever you need it.
- When does the special event occur?
- How many days after the special event does the contact volume impact appear? The impact of a power outage is immediate. The impact of a bill format change happens after the postal service delivers the bills and the customers open the mail.
- How long does the contact volume impact last in days? The impact of a power outage might only last a day, if service is restored during that time. The impact of a bill format change is likely to endure for a number of days, because customers handle bills at different times.
- What was the impact ratio? This is determined by dividing the contact volume that occurred with the special event by the contact volume that would most likely occur in the absence of the special event.

Impact on Distribution Requests

If the reference period you specify in a distribution request includes a special event, the special event date is excluded from the reference period. This ensures that the abnormal contact

patterns (including contact handle times) on the special event day do not affect the contact distribution patterns.

> **Example**: Consider a power outage that causes the daily contact volume to be halved—it is normal in the morning but goes to zero in the afternoon. A special event with an impact ratio of 0.5 is created. The date of this special event, if part of a reference period, will be excluded from that reference period.

Impact on Forecast Requests

If the reference period you specify in a forecast request includes a special event, the normalized contact volume is calculated by dividing the actual contact volume on the special event day by the impact factor. That is:

> Normalized contact volume = Actual contact volume on special event date ÷ Impact factor

In the power outage example, let us say that the actual contact volume on the day the power outage occurred was 5,000 contacts. The power outage special event has an impact factor of 0.5. Using the above equation:

> Normalized contact volume = 5,000 ÷ 0.5 = 10,000

The contact volume in the reference period has been normalized to 10,000 contacts to compensate for the effect of the special event, which makes the forecast more accurate.

Limitations of Special Events

Special events are used to negate the effects of a sudden and nonrepeating change in the contact volume in the past to ensure that forecasts do not include these anomalies.

Special events cannot be used to predict changes in contact volume due to future events, such as an upcoming marketing campaign. These types of events can be accommodated either automatically or manually during the forecasting process.

Managing Special Events

Use the Special Events page (Application Manager > Special Events) to create and manage special events and assign them to service queues.

Best Practices: It is recommended that you do not delete a special event. If a special event is deleted, the historical data associated with it will be lost, which can affect forecast accuracy.

The fields on the page when you create, edit, or delete a special event are described below.

Field	Description
Special Event Name	Enter a name for the special event.
Impact Delay	Enter the delay in whole days between the special event's occurrence and when it actually affects the contact center. Default value = 0.
Impact Duration	Enter the number of whole days you expect the effects of the special event to last. Default value = 1.
Impact Ratio	Enter the impact of the special event on normal contact volume. Default value = 1.0.

The fields on the page when you assign a special event to a service queue are described below.

Field	Description
Service Queue	Select the service queue you want to assign the special event to.
Special Event	Select the special event you want to assign to the service queue.
Event Date	Select the date of the special event.
Impact Delay	This field is autofilled with the value configured for the special event. You can change it if desired.
Impact Duration	This field is autofilled with the value configured for the special event. You can change it if desired.

Field	Description
Impact Ratio	This field is autofilled with the value configured for the special event. You can change it if desired.
Comment	Enter a comment about the special event if desired.
Assign button	Click this button to assign the event to the service queue. It is added to the Assigned Events table.
Delete button	Click this button to delete the selected special event from the Assigned Events table.

Shift Budget Analysis Request

A shift budget analysis request generates the data needed to analyze shift costs for one or more service queues.

> **Note**: There must be a production forecast for the period you want to analyze for the request to run successfully.

Once you have run this request, you can run a shift budget analysis report.

Generating a Shift Budget Analysis Request

To generate a shift budget analysis request (Application Manager > Shift Budget Analysis Request), follow these steps:

1. Enter a start date and end date for the period whose data you want to analyze.
2. Select the one or more service queues.
3. Add the parameters of the shifts you want to analyze. Click Add to add a row to the table, and then for each row, enter the shift parameters:
    - Select the shift length from the drop-down list.
    - Enter the desired utilization percentage. This is the percentage of time agents are in service.
    - Enter the maximum number of agents available to work. If you want WFM to determine this, enter 9999.

- Select the days of the week you want to use in the analysis. Select All to select each day of the week in one click.

4. Schedule the request. By default the request runs immediately.

Shrinkage

Contact center shrinkage is how much time is lost in the contact center due to unscheduled off-phone activities. Reasons for shrinkage include a wide range of events that result in agents logged off the phone during their normal schedule. Depending upon the time frame being evaluated and what is currently scheduled, shrinkage events can include (but are not limited to) vacations, breaks, lunch, holidays, sick time, and training.

The shrinkage percentage is used to take this into account when running a schedule. When shrinkage percentages are applied, the schedule overstaffs the service queue by the shrinkage percentages configured in this table.

The number of agents available to work when a schedule is run is typically not the same as the actual number of agents available once that future date arrives. This is due to predictable and unpredictable activities that cause these agents to no longer be available to work. The percentage difference between the two numbers is the shrinkage percentage.

> **Example**: On September 1 a schedule is run for the week of September 21. On August 31, Agents A, B, and C submitted time off exception requests for September 23. Only Agent A's request was approved on September 1 before the schedule was run, and so Agent A is not considered available to work on that day. Agent B's and Agent C's time off requests were not approved until September 3, and so were scheduled to work on September 23 despite their pending time off requests when the schedule was run. When those requests are approved on September 3, the number of agents scheduled to work on September 23 shrinks by two agents.

The Shrinkage page enables you to enter shrinkage percentages into WFM for the current week and for up to 12 weeks into the future. Each week, the shrinkage percentage lessens as a schedule week approaches the current day. This is because the activities (such as time off) that remove agents from the pool of available agents are added to the schedule, and you do not need to allow for the same amount of shrinkage each week. You become more certain of the number of agents available to be scheduled as you draw closer to the schedule week.

The Shrinkage table is set up so you can divide your contact center's shrinkage percentages among various general categories: absenteeism, time off, meetings, training, and coaching.

Note that you do not need to use those categories. WFM considers only the total percentage for each week in its calculations. You can put an overall shrinkage percentage in any of the available columns for each week.

Managing Shrinkage

To enter shrinkage percentages (Application Manager > Shrinkage) for your contact center, do the following.

1. Determine how many weeks out you want to enter shrinkage percentages. The Shrinkage table can accommodate up to 13 rows, the current week plus 12 weeks into the future. To add a row, click Add at the bottom of the table. New rows are always added at the bottom. To delete a row, select the row you want to delete and click Delete at the bottom of the table.
2. In each row, enter the desired shrinkage percentage for a category. You do not need to enter a percentage for every category, or to use categories at all. You can enter an aggregate shrinkage percentage in any column except the Totals column. The Totals column is automatically updated as you add percentages to the other columns in the table.
3. When you have completed entries in the table, click Save.

Copy Schedule Activities

The Copy Schedule Activities page allows you to copy activities from one agent's schedule on a particular day to other agents' schedules on selected days. The copy function overwrites whatever is on those agents' schedule in those time slots with the source agent's activities.

Copying Schedule Activities

Use the Copy Schedule Activities page (Application Manager > Copy Schedule Activities) to copy activities from one agent's schedule to other agents' schedules.

The fields on the Copy Schedule Activities page are described below.

Field	Description
Agent	Select the agent whose schedule is the source of the activities you want to copy.
Date	Select the date of the source agent's schedule.

Field	Description
Schedule	Once you select an agent and date, the agent's schedule for that day appears. Select the check boxes next to the activities you want to copy.
Select Agents	Select the agents whose schedules you want to copy the activities to.
Select Dates	Select the dates you want the activities copied to. The dates must have a schedule generated for them.
Copy	Click Copy to copy the activities. This button is not enabled until you have completed all fields on the page.

Services

The pages in this section of Application Management enable you to configure the service queues in your contact center.

The pages are:

- Service Queue Types
- Service Queues
- Skill Mappings
- Service Queue Closed Days
- Service Queue Groups
- Firm Date Associations

Service Queue Types

The service queue type describes the kind of contact a service queue handles. It allows you to group like service queues together into service queue groups and virtual service queues, and to generate forecasts for like service queues.

There are two types of contacts:

- **Interactive contacts** are agent/customer interactions that occur in real time, such as calls and chats.
- **Non-interactive contacts** are agent/customer interactions that do not occur in real time, such as email, tweets, social media, and faxes.

Each service queue type has a unique name. For example you can create a service queue type called Twitter with a contact type of Non-interactive, and another called Chat with a contact type of Interactive.

WFM comes with two system service queue types: Voice/Interactive and Email/Non-interactive. If you are upgrading from a previous version of WFM that allowed you to configure service queues for calls or email, then those service queues are automatically assigned the Voice or Email service queue type.

There are limitations on what you can do with a service queue type once it has been created.

- You cannot change its contact type. For example, if you create the ABC service queue type with a contact type of Interactive, you cannot change it to Non-interactive later on.
- If a service queue type is assigned to a service queue, you cannot delete it.
- You cannot edit or delete the system service queue types, Voice and Email.

You can, however, change the name of a service queue type you created even after it has been assigned to a service queue. The new name will be reflected throughout the system.

Managing Service Queue Types

Service queue types are configured and maintained on the Service Queue Types page (Application Manager > Service Queue Types).

To create a new queue type:

1. Choose Create a new service queue type.
2. Enter a unique name for the service queue type that describes the kind of contact a service queue handles, with a maximum of 50 characters.
3. Choose the contact type, interactive or non-interactive.
4. Click Save.

To edit an existing service queue type:

1. Choose Edit or delete an existing service queue type.
2. Select the desired service queue type from the drop-down list.

3. Edit the service queue type's name as desired. You cannot change the contact type.
4. Click Save.

To delete an existing service queue type:

1. Choose Edit or delete an existing service queue type.
2. Select the desired service queue type from the drop-down list.
3. Click Delete.

Note: You cannot delete a service queue type that is assigned to a service queue, or either of the system service queue types (Voice and Email).

Service Queues

A service queue is a group of agents to which contacts are routed. It is generally associated with a specific skill.

In WFM, you schedule agents to support service queue requirements. For this reason, WFM makes service queues the focal point for schedules and forecasts.

Environments with Synchronized ACDs: WFM imports service queue data from these ACDs via the Sync service. Imported service queue data that cannot be changed in WFM (the service queue name and ID) is read-only on the Service Queues page. That data can only be changed in the ACD. Service queues you create in WFM exist only in WFM and are not added to the ACD. For more information, see Synchronizing Service Queue Data.

Environments with Non-synchronized ACDs: The service queues you create in WFM must have the same names and IDs as are set up for them in your ACD. This enables WFM to associate the historical data imported from the ACD into WFM with the correct service queue.

Managing Service Queues

Use the Service Queues page (Application Manager > Service Queues) to create, edit, and delete service queues.

Best Practices: It is recommended that you do not delete service queues. If you delete a service queue, all the historical data associated with it is lost.

The fields on the Service Queues page are described below.

Field	Description
Service Queue ID	The unique ID that identifies the service queue. In synced systems, the ID is created in the ACD. Once an ID is assigned to a service queue, it cannot be changed.
Service Queue Name	The service queue's name. In synced systems, the name is created and maintained in the ACD.
Do not generate forecasts or schedules for this service queue	Select this check box to deactivate the service queue. It will no longer be available when generating distributions, forecasts, and schedules. However, you will still be able to view its historical data.
This service queue allows multi-skill agent queuing (MSAQ)	Select this check box to enable MSAQ for the service queue.
Service Queue Type	Select the service queue type that describes the kind of contacts this service queue handles. See Service Queue Types for more information.
Service Queue Priority	Enter the service queue priority, any number from 0 to 999, with 0 being the highest priority. The service queue priority allows WFM to resolve scheduling conflicts when agents are assigned to multiple service queues. **Example**: You designate some of your agents to support two service queues. If WFM generates the schedules for the two service queues and discovers that there are not enough agents to support all forecast requirements for both, it compares the priority value of each service queue and schedules agents for the service queue with the highest priority first.

Field	Description
Average Talk Time	Enter the average amount of time, in seconds, that a contact lasts for this service queue. WFM uses this information to determine the number of agents needed to meet requirements when it generates a distribution for this service queue. You can opt to let WFM calculate this value for you automatically when it generates a distribution by selecting the check box in the Service Queue Standard Times section of the Distribution Request page.
Average After Contact Work Time	Enter the average amount of time, in seconds, that an agent spends in after contact work for this service queue. WFM uses this information to determine the number of agents needed to meet requirements when it generates a distribution for this service queue. You can opt to let WFM calculate this value for you automatically when it generates a distribution by selecting the check box in the Service Queue Standard Times section of the Distribution Request page.
Redistribution Type	(Non-interactive service queues only) Select the redistribution type that determines how non-interactive contacts that arrive during the service queue's closed hours are redistributed among target intervals for forecasting purposes. Target intervals are determined by the handling threshold. Your options are the following: • None: Contacts that arrive during closed hours are ignored and not redistributed (default). • Proportional: Contacts are redistributed proportionally among target intervals based on the target intervals' distribution ratios. • Even: Contacts are redistributed evenly among the target intervals.

Field	Description
Handling Threshold	(Non-interactive service queues only) Enter the amount of time in which contacts must be handled, in minutes. Valid values are from 0 to 4,320 minutes (72 hours).
Service Level Objective	(Interactive service queues only) Enter the percentage of contacts to be answered within a specified number of seconds. The number of seconds must be greater than zero. WFM uses this goal to determine the number of agents needed to meet requirements when it generates a distribution and forecast for the service queue.
Forecast Precision Level Percentage	This read-only value is calculated when you run a forecast accuracy computation request for the service queue. If you have not done this, then the value displayed is 0%. The forecast precision level is a measure of how accurate a forecast was by comparing forecasted contact volume with actual contact volume. For example, if the forecast precision level is 105%, the forecasted contact volume was 5% greater than the actual contact volume.
Opening and Closing Hours	Enter the days and hours of operation of the service queue. A check indicates that the service queue is active, or open, on a particular day. The hours of operation are in 24-hour format.
Skill Mappings	Assign one or more skill mappings to the service queue and set their priorities (0–999, with 0 being the highest). Skill mappings link agents to service queues. In order for agents to be scheduled to support this service queue, both the agents and the service queue must be assigned to the same skill mapping. Assigning a priority to each skill mapping allows WFM to resolve scheduling conflicts when agents with multiple skills belong to multiple service queues.

Field	Description
Virtual Service Queue	Select the check box if this service queue is a virtual service queue. Once you do this, a service queue selection pane opens so you can assign service queues to be members of the virtual service queue. The available service queues all have the same service queue type. **Note**: Do not make a synced service queue a virtual service queue. Select this check box only if you created the service queue in WFM.

Field	Description
Scheduling Order	Use the table to configure the order in which agents are scheduled for the service queue. WFM compares the agents based on this order and schedules the highest priority agents first. If you want to reset the order to the system default, click the Restore Default button. The criteria used are the following: • Maximum hours available: The sum of the maximum number of hours an agent can be scheduled each day of the week • Minimum hours available: The sum of the minimum number of hours an agent can be scheduled each day of the week • Maximum hours per week: The maximum number of hours per week configured for the agent's work shift (from the Work Shifts page) • Minimum hours per week: The minimum number of hours per week configured for the agent's work shift (from the Work Shifts page) • Company start date: The date the agent started working for the company (from the Agents page) • Department start date: The date the agent started working for the department (from the Agents page) • Rank: The agent's ranking in the contact center based on expertise (from the Agents page)
Color	Select the color you want to represent this service queue in the schedule.

Virtual Service Queues

A virtual service queue is a collection of service queues with the same service queue type. Virtual service queues exist only in WFM.

Once you create a virtual service queue, WFM starts collecting historical data for it. If historical data already exists for each service queue in the virtual service queue, you can merge the historical data from the source service queues into the virtual service queue using a Historical Data Merge Request.

Create a virtual service queue when you want to generate a single forecast, distribution, or schedule for a group of like service queues. The following are examples of some situations where a virtual service queue is useful.

Example: A contact center has one service queue for premium customers and another for regular customers. Premium customers reach an agent faster and receive higher value services. The agents who handle customer calls are members of both service queues. Creating a virtual service queue that is comprised of the premium and regular customer service queues simplifies scheduling.

Example: An organization has IT help desks in multiple locations. The contact center uses a service queue for each location to account for multiple time zones, and to allow reporting by location. The contact center routing consolidates the agents from each location into a single pool, and distributes calls to the next available agent regardless of location. By grouping the service queues into a virtual service queue, WFM can schedule the agents as a single group in a pattern that is consistent with the routing and time zones.

Multi-Skill Agent Queuing

Multi-skill agent queuing (MSAQ) allows contact centers to schedule agents so they can support several service queues over the course of one work shift. When you configure the MSAQ feature, you indicate the relative priority of providing support for each service queue. MSAQ offers an effective way to address the challenges of scheduling in contact centers with multiple products and services, multiple languages, and agents shared across different service queues (cross-skilled agents).

MSAQ is not appropriate for all contact centers. The decision to use MSAQ depends on the kind of contact routing that the contact center uses. Most contact centers use one of the following types of contact routing.

- Basic skill-based routing
- Simple skill-based routing

- Complex skill-based routing
- Very complex skill-based routing

Basic Skill-based Routing

The contact center supports a limited number of products, services, and languages. Most of the agents are cross-trained, and 80 percent or more of the agents have the same skills. As a result, many of the agents can respond to many of the contacts.

The advantages of basic skill-based routing include the following:

- Easy to configure
- Easy to maintain
- Results are easy to analyze
- Provides optimal coverage for that skill
- Scheduling sequence is determined by the scheduling order parameters

The disadvantages of basic skill-based routing include the following:

- Coverage of requirements is available only for aggregated skills, and cannot be viewed for individual skills
- Schedules appear to show that every agent is responding to the same type of contact

Simple Skill-based Routing

The contact center supports more products, services, and languages. Some agents are cross-trained and can respond to almost any contact. Most of the agents can respond to some of the contacts.

The advantages of simple skill-based routing include the following:

- Easy to configure
- Easy to maintain
- Results are easy to analyze
- Optimum coverage of requirements for service queues with higher priorities
- Coverage of requirements displayed for either individual or aggregated service queues
- Scheduling order is determined first by service queue priority, then by scheduling order parameters

The disadvantages of simple skill-based routing include the following:

- Agent schedules display on their first priority service queue; you might have to select several service queues to display some agent schedules.
- If the contact center is short-staffed, the lowest priority service queue will be short-staffed. Others will be staffed adequately, if there are enough resources with those skills.

Complex Skill-based Routing

This type of contact center supports many products, services, and languages. Only a few of the agents are cross-trained. Some of the agents can respond to greater than half of the contacts. Some of the agents are specialists, and can only respond to fewer than half of the contacts.

The advantages of complex skill-based routing include the following:

- Coverage of requirements displayed for either individual or aggregated service queues
- Scheduling order is determined first by service queue priority, then by scheduling order parameters

The disadvantages of complex skill-based routing include the following:

- Harder to configure, maintain, and analyze
- Agent schedules display on their first priority service queue; you might have to select several service queues to display some agent schedules.
- If the contact center is short-staffed, the lowest priority service queue will be short-staffed. Others will be staffed adequately.
- Agents might be scheduled on their highest priority service queue, which might not be their main skill.

Very Complex Skill-based Routing

This type of contact center supports a wide variety of products, services, and languages. None of the agents are cross-trained. Each agent can respond to fewer than half of the contacts. Only a few agents have any given skill.

It is recommended that you not use this type of routing when scheduling with WFM.

Configuring MSAQ Parameters

This example shows how a contact center that uses simple skill-based routing could apply MSAQ. The contact center has 10 agents and four service queues. Most of the agents support two service queues, and a few agents support three or four service queues.

The contact center completes the following tasks to implement multi-skilled agent scheduling.

Task 1: Analyze Agents and Service Queues

To analyze the agents and service queues, consider these questions:

- How many service queues are to be scheduled? In this example, there are four.
- Are there any patterns that allow service queues to be merged? In this example, most agents support two service queues, so these two service queues can be merged. Merging them facilitates scheduling and coverage analysis, since agents are scheduled for fewer service queues.

Task 2: Create a Virtual Service Queue

1. Use the Service Queues page to create a new virtual service queue composed of the two service queues that most agents support.
2. Use a Historical Data Merge Request to merge the two service queue's data.
3. Use the Skill Mappings page to create a new skill mapping. Assign the virtual service queue and the agents who support it to the new skill mapping.

Task 3: Determine Service Queue Priorities

The best coverage is usually obtained when the service queue with the fewest agents has the highest priority. Start with this rule, but consider experimenting with priority settings to find the best coverage.

Task 4: Configure Service Queues

On the Service Queues page for each of the four service queues and the virtual service queue, do the following:

- Select the MSAQ check box
- Set the service queue priority according to your findings in Step 3
- Assign a skill mapping to the service queue and set its priority to 1

Task 5: Produce Distributions and Forecasts

For each of the four service queues and for the virtual service queue, create a distribution and forecast.

Task 6: Produce an MSAQ Schedule

Run a schedule request for the four service queues and the virtual service queue.

Task 7: Refine the Schedule

To refine the MSAQ schedule, you can modify the following parameters:

- Service queue scheduling order (priority)
- Agent work shift assignment, rank, and seniority

In order to modify the service queue scheduling order, it helps to understand how WFM schedules agents. By default, WFM follows this order:

1. Service queues by priority, with the highest priority first.
2. For each service queue, in order of priority:
    a. Finds all agents who can support the service queue
    b. Schedules agents with fixed work shifts in order of their rank
    c. Schedules agents with variable work shifts in order of their rank
3. If requirements are covered for the service queue, WFM goes on to the next service queue.

If you want to get better coverage of all service queues, you might need to change the service queue priorities, or change the scheduling order parameters so that agent rank is used first. In that case, you might also need to change the rank of individual agents.

If multi-skilled agents are being scheduled first because they can support the highest priority service queue, and they should be scheduled later so they can fill in around single-skilled agents, you can change the scheduling order parameter to use the agent rank first, and then assign lower ranks to multi-skilled agents.

The last agents to be scheduled are more likely to be assigned to the lower priority service queues because the higher priority service queues are probably already covered by other agents.

To implement scheduling by rank, follow these steps:

1. On the Service Queues page for each service queue, reorder the Scheduling Priorities so that Rank is first.
2. On the Agents page for each agent, assign a rank to the agent.

Skill Mappings

Skill mappings provide links between service queues and agents. The agents assigned to a skill mapping generally have the same skills.

To schedule an agent to support a service queue, you must assign the agent to the skill mapping associated with the service queue. You can assign an agent to more than one skill mapping. Agents not assigned to a skill mapping cannot be scheduled.

Note: When WFM imports service queue information from synced ACDs, it automatically creates a skill mapping for each service queue on a one-to-one basis. The skill mapping has the same name as the service queue, and the service queue is automatically assigned to it. The sync happens only once. If you delete the skill mapping it will not be recreated the next time synchronization occurs.

The service queues assigned to the skill mapping are prioritized. This enables WFM to resolve scheduling conflicts when agents are assigned to multiple service queues.

Example: You designate some of your agents to support two service queues and assign a priority to each service queue. When WFM generates the schedules for the two service queues and discovers there are not enough agents to support all forecast requirements for each service queue, it compares the priority value assigned to the service queues. WFM then schedules agents for the service queue with the highest priority first.

Managing Skill Mappings

Use the Skill Mappings page (Application Manager > Skill Mappings) to create, edit, and delete skill mappings.

Note: In environments that sync with the ACD, any new skill mappings you create in WFM will not be added back into the ACD.

Best Practices: It is recommended that when you configure the synced skill mapping, you change its name to distinguish it from its service queue.

Best Practices: It is recommended that you do not delete skill mappings. If you delete a skill mapping, all the historical data associated with it is lost.

The fields on the Skill Mappings page are described below.

Field	Description
Skill Mapping Name	Enter a unique name for the skill mapping. Maximum length is 50 characters.
Service Queues	Assign service queues to the skill mapping.
Priority	Assign a priority to each selected service queue, from 0 to 999, with 0 being the highest priority. This priority enables WFM to resolve scheduling conflicts when agents are assigned to multiple service queues.
Agents	Assign agents to the skill mapping. The assigned agents will then be able to be scheduled for the assigned service queues.

Service Queue Closed Days

Use the Service Queue Closed Days page to designate dates on which a service queue is closed and therefore not able to handle customer contacts. Typical closed days are national holidays.

Closed days should not be used for the days when the service queue is routinely closed. For example, a service queue might be open Monday through Friday and closed on Saturday and Sunday. This is more appropriately configured on the Service Queues page in the Opening and Closing Hours section.

In WFM, all service queues are assumed to be open every day of the year unless configured otherwise.

IF closed days are the same from year to year for a service queue, or the same for multiple service queues, you can configure them for one service queue and then copy them to other years and other service queues.

Note: Designating a day as closed changes the forecast for that day to zero contacts. However, it does not affect any schedule that is already generated for that day. If agents are scheduled to work on a day that is designated as closed, they remain scheduled for that day. A solution for this situation is to create an exception and assign it to the service queue for that day.

Best Practices: It is recommended that you update a service queue's closed days at least once a year.

Managing Service Queue Closed Days

Use the Service Queue Closed Days page (Application Manager > Service Queue Closed Days) to create, edit, and delete closed days.

The fields on the Service Queue Closed Days page are described below.

Field	Description
Service Queue	Select the service queue whose closed days you want to configure.
Year	Select the year that contains the closed days.
Select Closed Days	Select the closed days from the calendar.
Copy To	Once you have configured closed days and saved the record, you can copy those closed days to another year for the same service queue or to any year for another service queue. Select the desired year and/or service queue and then click Copy.

Firm Date Associations

A firm date association is a link between two dates that fall on different days of the week from year to year. Firm date associations are useful because when WFM generates a forecast, it uses historical data from the same day of the week.

To ensure that WFM uses a date with similar data for its forecast, you must create firm date associations.

Example: To generate a forecast for Wednesday, January 1, 2014, WFM uses data from Wednesday, January 2, 2013. However, the 2014 date is New Year's Day and the 2013 date is the day after New Year's Day. The contact data for the two dates is probably going to be significantly different because of the holiday. Creating a firm date association between January 1, 2014 and January 1, 2013 corrects this when generating a forecast.

If you do not have adequate historical data in the WFM database to use firm date associations, you can generate a forecast and then edit the data for that specific date to reflect correct information.

Managing Firm Date Associations

Use the Firm Date Associations page (Application Manager > Firm Date Associations) to create, edit, and delete associated dates for individual service queues.

Once you set up firm date associations for one service queue, you can copy them to another service queue.

You cannot edit associated dates once you have set them up, but you can edit their descriptions. If you have made an error in selecting the two dates, delete the date association and start again.

The fields on the Firm Date Associations page are described below.

Field	Description
Service Queue	Select the service queue you want to create firm date associations for.
Associate this future target date	Select the date in the future you want to link to a past reference date. This is the date you will be creating forecasts for.
With this historical reference date	Select the date in the past that has historical data similar to what you expect on the future date.
Description	Enter a description of the associated dates to identify them, such as "New Year's Day" or "Annual Sales Event." This is the only field you can edit once you save a firm date association.
Add button	Click the Add button to add the associated dates to the table.
Delete button	If you want to delete a date association, select the check box next to it in the table and click Delete.

Field	Description
Copy to Service Queue	Once you have saved firm dates for a service queue, you can copy them to another service queue. Select the target service queue in this field and then click Copy. **Note**: The Copy action overwrites any firm date associations that might have been set up for the target service queue.

Service Queue Groups

The Service Queue Groups page (Application Manager > Service Queue Groups) allows you to create and manage service queue groups.

A service queue group is a collection of individual service queues of the same service queue type. When service queues are combined into one service queue group, all the data for the individual service queues is rolled up into a total number for each metric.

Managing Service Queue Groups

Use the Service Queue Groups page (Application Manager > Service Queue Groups) to create, edit, and delete service queue groups.

The fields on the Service Queue Groups page are described below.

Field	Description
Service Queue Group Name	Enter the name of the service queue group.
Select Service Queue Type	Select the service queue type for the service queue group.
Service Queues	Select the desired service queues from the list of the available service queues of the service queue type you selected.
Color	Select the color you want to assign to the service queue group.

Directory Numbers

A directory number (DN) is a phone number customers use to connect to a specific service queue. The ACD actually routes calls received on a specific DN to a specific service queue.

You can create a DN in WFM to achieve the following results:

- Duplicate the DNs used in the ACD and collect historical data for them.
- Route a DN to go to specific service queues at different times during the day. If you do so, the historical data for those service queues will include the calls received through the DN.

- Route a DN to go to specific service queues when all agents in the first service queue are busy.

WFM captures the following data from a DN and compiles it with the associated service queue:

- Contacts Offered
- Contacts Accepted
- Contacts Abandoned
- Contacts Blocked
- Average Speed of Answer
- Quality of Service (Service Level)

Note: Using DN data rather than service queue data can provide more accurate information for forecasting in service queue overflow conditions. With service queue overflow, each contact is associated with the service queue it ended up on as opposed to the service queue that it was originally intended for. This can have a negative impact on forecasting. You can avoid this situation by using DNs.

Managing Directory Numbers

Use the Directory Numbers page (Application Manager > Directory Numbers) to create, edit, and delete DNs.

Best Practices: It is recommended that you do not delete DNs. If you delete a DN, all the historical data associated with it is lost.

The fields on the page are described below.

Field	Description
Directory Number	Enter the DN. It must be identical to the DN in the ACD.
Description	Enter a description of the DN.
Service Queues	Select one or more service queues to associate with this DN. Once you have assigned a service queue, enter the start time and end time and days of the week that the service queue handles calls from the DN. At least one day must be selected.

System Configuration

The pages in this section of Application Management enable you to configure system-wide settings in the WFM environment and manage user requests.

The pages are:

- Global Settings
- User Requests
- Adherence State Mapping

Global Settings

The Global Settings page enables the administrator to set up system-wide parameters for WFM. These parameters are defined in the following table.

Updates to global settings do not go into effect on client desktops until users refresh or restart their browsers.

Parameter	Description
Schedule Interval	NO LONGER USED. Sets the length of the intervals the daily schedule is divided into. The default value is 30 minutes.
First Day of the Week	Sets the first day of the week of the schedule. The default value is Sunday. Do not change this setting if you have already set up and assigned work shift rotations. If you do change it you will have to create new work shift rotations to incorporate the change.
Number of Weeks Visible in Agent Schedules	Sets the number of past and future weeks that are displayed in agent schedules.
Default Time Zone	Sets the time zone that is used by default in agent schedules. If you change it again, it applies to all users who are configured from that point on. You can apply the changed time zone to all current users by clicking the Apply to All Users button.

User Requests

Schedulers and administrators can send requests to the server to produce various scheduling and planning results. These requests are put into a queue and processed one at a time.

> **Note**: Administrators can see all requests. Schedulers can see only the requests that they generate.

The User Requests page (Application Manager > User Requests) lists all the requests that are run. The list displays the request type, the time and date the request was submitted, the name of the user who made the request, and the current status of the request.

The requests can be filtered and sorted by any column. Requests stay in the list until they are deleted.

> **Note**: Requests that are scheduled to be run at a later date and time than when they are submitted are shown as Pending until they run.

> **Note**: If a capture request is in pending state for longer than seems reasonable, consult the log for possible reasons the request is not being processed.

Managing User Requests

By default all requests are displayed on the User Request page, with the most recent request at the top of the list.

- To filter the list, enter your selection criteria and click Display User Requests.
- To sort the list, click any column header to sort the table in ascending or descending order.
- To view more details about a request, double-click anywhere in the request's row to display a popup window with the details.
- To delete one or more requests from the list, select the check box next to the request and click Delete. To select all requests for deletion, select the check box at the top of the table.

Note: You cannot delete requests that are tagged as In Progress. Requests that are tagged as Success, Failure, and Pending can be deleted.

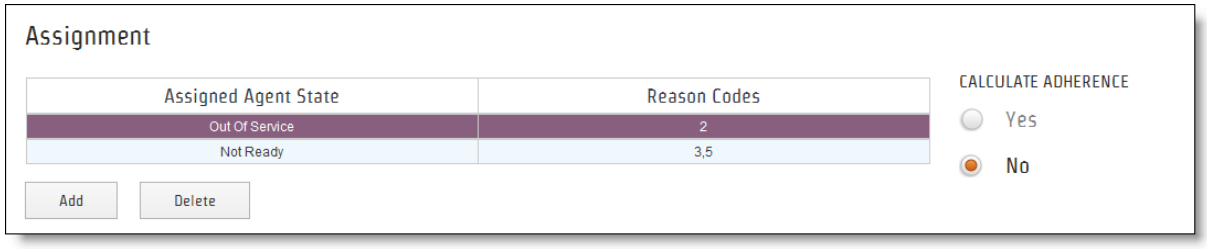
Adherence State Mappings

The Adherence State Mappings page (Application Manager > Adherence State Mappings) enables you to specify which agent states and reason codes determine if an agent is or is not in adherence for a scheduled activity, and which schedule activities are used to calculate agent adherence percentages.

The default settings are the most common method for calculating adherence, and it is not necessary for you to change them. However, the settings can be customized for your contact center if desired.

Agents will be shown to be in adherence if they are in one of the agent states mapped to a specific scheduled activity. If they are in an agent state not mapped to the scheduled activity, they will be shown to be out of adherence.

Example: In the following figure an administrator has mapped two ACD agent states, Out of Service (with reason code 2) and Not Ready (with reason codes 3 and 5), to the Assignment schedule activity. This means that when an agent is scheduled with an assignment activity, that agent must be in the Out of Service agent state with reason code 2 or the Not Ready agent state with reason code 3 or 5 in order to be in adherence. Any other agent state/reason code during the scheduled time will result in the agent being shown not in adherence.



The administrator has also decided that whether or not an agent is in adherence for the Assignment schedule activity will not be considered when calculating that agent's adherence percentage score. The Calculate Adherence option is set to "No".

The following table lists the columns that appear in the Adherence State Mapping window.

Scheduling columns

Name	Description
Assigned Agent State	The agent state and reason code used to calculate agent adherence to the schedule activity.
Reason Codes	The reason codes associated with the agent state and used to calculate agent adherence to the schedule activity.
Calculate Adherence	Select Yes to include or No to exclude time adherence data for the schedule activity in the calculation of the agent's adherence percentage.

Managing Adherence State Mappings

To customize how adherence is shown and calculated in your contact center, do the following.

1. For each schedule activity, configure at least one agent state you want considered to be in adherence. Select the appropriate agent state from the agent state drop-down list. If you need to add an agent state field, click Add. If you need to delete an agent state field, select the field and click Delete.
2. Configure the reason codes you want to consider as being in adherence for the schedule activities that use reason codes. Valid values are 1–65535.
    - A blank field indicates all reason codes are considered.
    - A dash between numbers indicates a range. "1–3" means reason codes 1, 2, and 3 are considered.
    - A comma between numbers indicates specific numbers. "1,3,5" means reason codes 1, 3, and 5 are considered.
    - You can use a combination of a range of numbers and specific numbers, for example, "1–5,7,9,12".
3. Select the Calculate Adherence option you want. Select Yes to include or No to exclude time adherence data for the schedule activity in the calculation of the agent's adherence percentage.
4. Click Save to save your changes.

To revert the adherence state mapping settings to the default configuration, click Reset.

Adherence State Mapping for Non-Interactive Service Queues

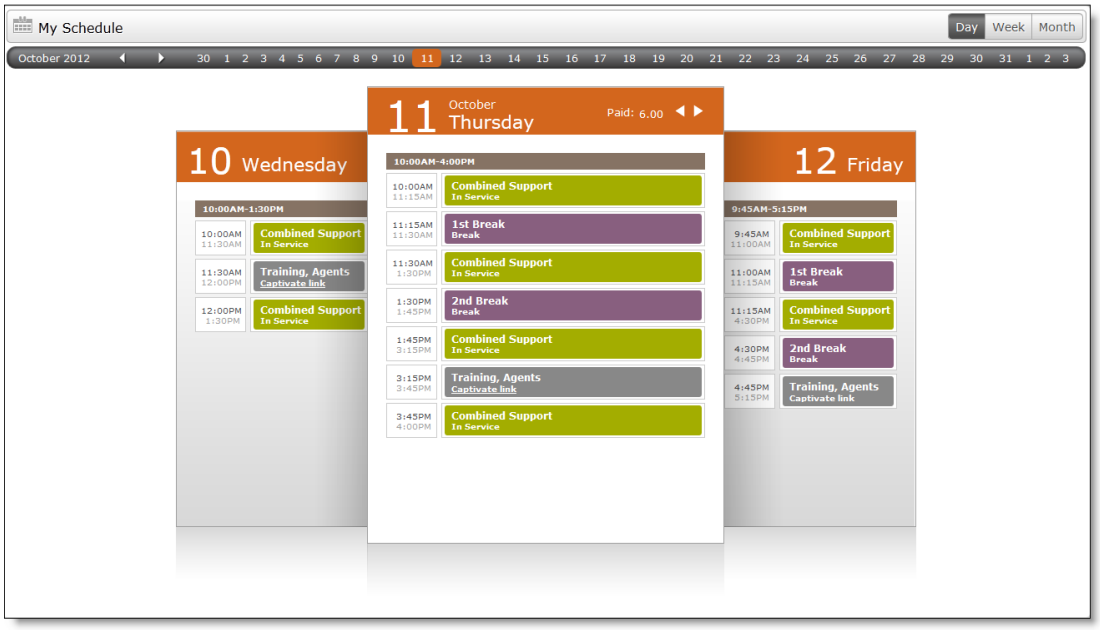
Adherence can be calculated for non-interactive service queues (for example, those that handle customer email). Since the default settings are intended for service queues that support interactive customer contacts, you must configure custom mappings of all ACD states that agents are allowed to be in when handling non-interactive contacts.

Example: Your contact center might want to map the following agent states to the In Service activity for a service queue that supports non-interactive customer contacts:

- Ready Available
- Talk
- After Contact Work
- Hold
- Out of Service (reason code 10)
- Not Ready (reason code 20)

My Schedule

The My Schedule application allows you to view your schedule by day, week, or month.



By default, the My Schedule application displays today's schedule in Day view in the time zone configured for you by the administrator. You can also view your schedule in Week and Month view for any date a schedule has been created.

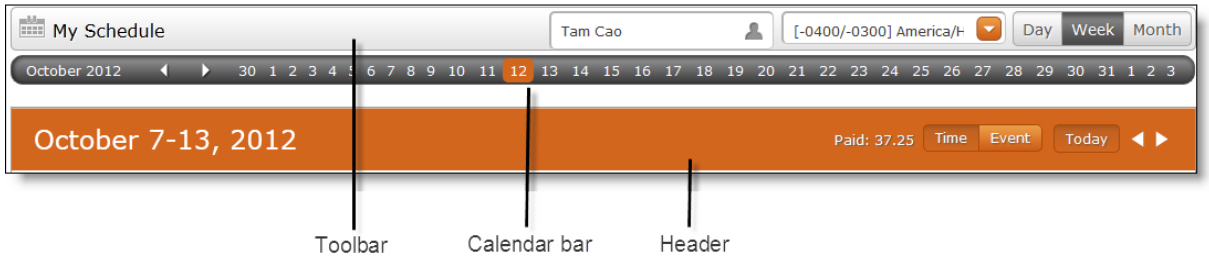
If you are a supervisor, you can view your own schedule and the schedules for agents on your teams, and change the time zone a schedule is displayed in.

Activities are color-coded according to their types. The colors are configured by the administrator. For example, breaks might be displayed in purple and meetings in blue. The color-coding is visible on any schedule view you choose, either as background for the activity listing or as a stripe or square next to the activity.

My Schedule Views

The My Schedule toolbar allows you to view your schedule by day, week, or month.

The graphic below displays the toolbar, calendar bar, and header seen by supervisors, schedulers, and administrators. The agent's view is identical except that the Select Agent and Select Time Zone fields are not present on the toolbar.



The following table describes the My Schedule toolbar, calendar bar, and header functionality.

Field	Description
Toolbar	
Select Agent	(Supervisors only) Select the agent from the drop-down list whose schedule you want to view. If you are an agent as well as a supervisor, your name is the default.
Select Time Zone	(Supervisors only) Select a time zone in which to view an agent's schedule. By default the schedule is displayed in your display time zone. See Time Zone Considerations for a detailed explanation of time zones and how they relate to schedules.
Day/Week/Month	Click to select the schedule view desired. The default view is Day view for the current date. Click the left and right arrows to view schedules in the past or future, or select a specific day or month from the calendar bar.
Calendar Bar	

Field	Description
Month and year	The month and year displayed is shown at the left end of the calendar bar. You can quickly navigate to another date by clicking the month and year and choosing the desired period from the drop-down menu.
Day view/Week view	Click any specific date from the 5 weeks of dates displayed in the calendar bar to view the schedule for that date or the week that includes that date. Each date has a tooltip that names the day of the week. Click the left and right arrows to change the month displayed. The displayed date is highlighted in orange. Today's date is highlighted in black. In the Week view, details of each activity are displayed in a tooltip when you hover the mouse over the activity. The Day and Week views can also include a hyperlink related to the schedule activity. For example, if you are scheduled for e-learning, you click the hyperlink in the schedule to view the e-learning training website.
Month view	Click any month from the 12 months displayed to view the schedule for that month. Six weeks are displayed in Month view, starting with the week the first day of the selected month is in. Click the left and right arrows to change the year displayed. The displayed month is highlighted in orange. The current month is highlighted in black. The activities for each day's schedule are limited to four listed events. "More" appears at the bottom of the date square if there are more than four activities on that day. The entire schedule is summarized in a tooltip when you hover the mouse over the bar at the top of each calendar square.
Header	
Paid	The total paid hours scheduled on the displayed day, week, or month.

Field	Description
Time	(Week view only) Displays each day's schedule to show the length of each activity on an hourly grid. If a schedule crosses midnight, all activities after midnight are displayed on the next day.
Event	(Week view only) Displays each day's schedule as a list of activities. All activities for the shift are displayed on the day the shift starts, even if the shift crosses midnight into the following day. This view is recommended for printing a schedule.
Today	(Week and Month view only) Click to display the week or month that contains today's schedule.
Left/Right Arrows	Click to move you one day, one week, or one month back and forth in the schedule, depending on the view you are using.

Time Zone Considerations

All WFM users are assigned a display time zone by the administrator. The default setting is the time zone in which the WFM server is located (the server time zone). For a contact center with all locations in that same time zone, the default setting is likely used for all WFM users. However, if the contact center has locations in multiple time zones, users located in time zones other than the WFM server time zone can be assigned a user-specific display time zone so they see their schedules in local time.

> **Example**: If the WFM server is located in Chicago in the Central Time zone, then the default server time zone is Central Time. Agent A is in Chicago so his display time zone is the default server time zone. However, Agent B is in Los Angeles, so her display time zone is set to Pacific Time, and Agent C is in New York City, so his display time zone is set to Eastern Time. All three agents see their schedules in their local time zone.

It is possible for users to see their schedules in a different time zone than where they are actually located. It all depends on how the administrator has configured their display time zones. As a result, the times shown in the My Schedule application and widget do not necessarily match the local time shown on your computer.

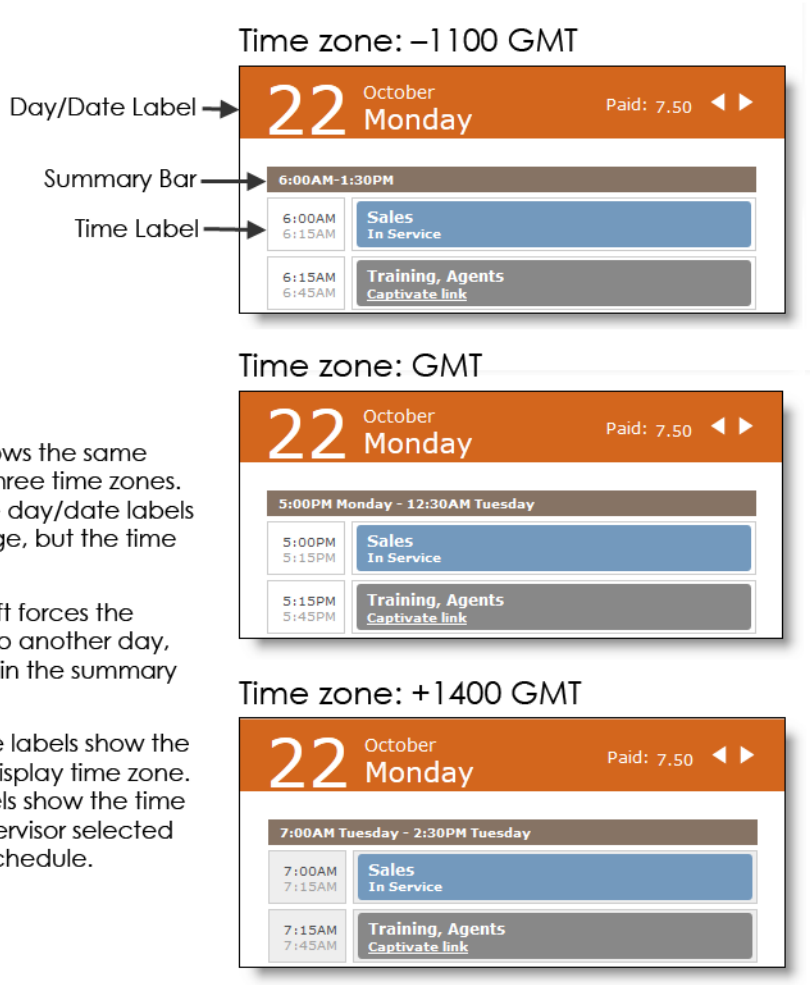
Supervisors also see their schedules and the schedules of the agents on their teams in the time zone assigned to the supervisor's user account. If a supervisor located in the Central Time zone views the schedule of an agent located in the Pacific Time zone, that agent's schedule will be shown in Central Time, because that is the supervisor's display time zone.

Supervisors can control which time zone is shown in My Schedule by changing it in the time zone drop-down list. A supervisor might want to see an agent's schedule as the agent sees it, especially if that agent is located far away from the supervisor and the time difference is more than a few hours. In that case, the supervisor selects the agent's local time zone from the time zone drop-down list.

NOTE: The time zone shown in the Select Time Zone drop-down list is not the display time zone assigned to the user whose schedule is displayed in My Schedule. It only reflects the time zone chosen by the supervisor to view an agent's schedule. The only way you can know what is a user's display time zone is to look up the display time zone set on the user's Users record.

It is important to note that when a supervisor changes the display time zone, only the time labels (the hours) on the displayed schedule change, and not the day/date labels. The day/date labels continue to reflect the supervisor's configured display time zone.

The following figure illustrates how a schedule changes depending on the time shift applied to it.



This figure shows the same schedule in three time zones. Note that the day/date labels do not change, but the time labels do.

If the time shift forces the schedule onto another day, that is shown in the summary bar.

The day/date labels show the supervisor's display time zone. The time labels show the time zone the supervisor selected to view the schedule.

Printing a Schedule

Use your browser's print functionality to print a schedule. The recommended view to print is the Week view set to show the daily schedules by event, not by time.

You might have to change the print default settings to achieve an optimal result (adjusting page orientation, margins, and so on). Consult your browser's documentation on how to work with the print settings.

Accessing Your Schedule Outside of Work

Agents can view their schedules outside of work through an email client or calendar application on a mobile device or personal computer. The email client or calendar application displays your WFM schedule as it appears in the WFM interface by reading the iCalendar data file from the WFM iCalendar Service.

Note: The iCalendar feature is only supported for agents, not supervisors or administrators.

Note: Agents can view only their own schedule.

Note: The color coding that appears in the WFM interface is not displayed when you view the WFM schedule on your mobile device or personal computer.

The following clients and devices are supported:

- Apple devices such as an iPhone or iPad (in conjunction with the Apple Calendar app)
- Microsoft Outlook
- Android devices such as a tablet or phone (in conjunction with a calendar app that can read an .ics file)

Consult your client or device documentation for exact instructions on how to add or import a calendar. Your mobile device or email client will typically access your WFM schedule via a URL. Ask your administrator for the correct URL. The format for the URL is as follows, where <base server> is the IP address of the WFM base server:

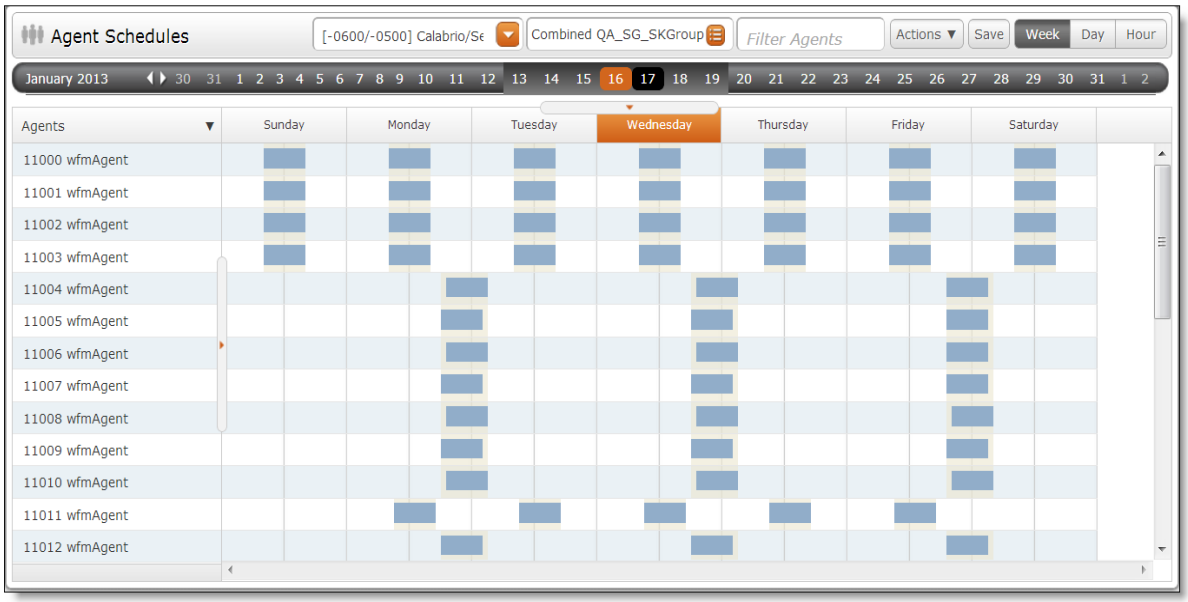
`https://<base server>:4430/calendar` (secure) or
`http://<base server>:8086/calendar` (unsecure)

You will be prompted for a username and password. These are the same login credentials you enter when logging in to WFM. If you are using Active Directory, you must use <domain>\<username>.

Note: If you are integrating your schedule into Microsoft Outlook, you must use two back slashes (\\<domain>\<username>).

Agent Schedules

Agent Schedules allows supervisors, schedulers, and administrators to manage the schedule for selected agents by updating the production schedule.



The process of scheduling agents for non-service activities (for example, meetings or training) after a schedule has been generated is called post-production planning. You can use Agents Schedules to find times when you can schedule agents for activities so that the service level is least affected.

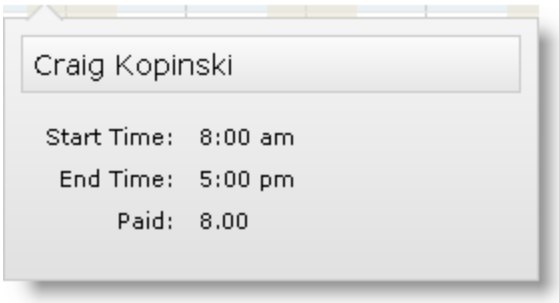
By default, Agent Schedules opens to today's date. You can quickly navigate to another date by clicking the month and year and choosing the desired period from the drop-down menu.

Use Agent Schedules to complete the following tasks.

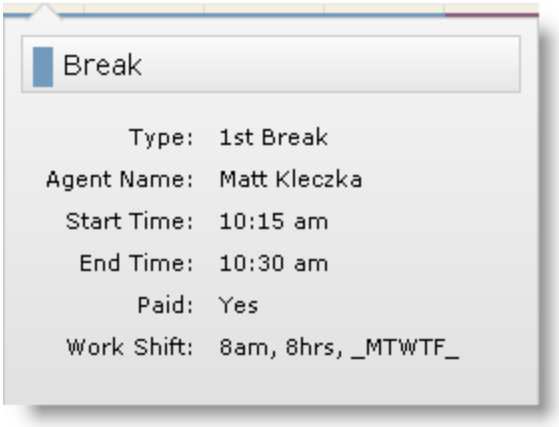
- Determine the optimal time to schedule an activity so that it has the least impact on the service level and insert the activity
- Trade schedules between agents
- Monitor real time adherence and conformance and other performance statistics

You can edit schedules only for the agents who are assigned to a team in your Main View. Agents who are not assigned to a team in your Main View are read-only and show a lock icon next to their names.

A popup appears when you hover over a schedule in the Agent Schedules window for the Day or Week option. The popup identifies the agent, the agent's start and end time, and whether or not the agent was paid.



A popup appears when you hover over an scheduled activity in the Agent Schedules window for the Hour option. The popup identifies the type of activity, the agent associated with the activity, the start and end time, whether or not the activity is paid, and the work shift.



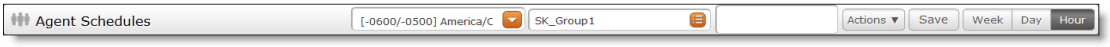
Note: Sometimes the popup appears to show an incorrect start or end time for the activity. The reason for this is that activities are in two layers. The bottom layer in the schedule display is used for in service, overtime, assignment and closed service activities. The upper layer is used for breaks, lunches, projects, and exceptions. If you

hover over a bottom layer activity, the popup shows the full length of time of that activity without taking into consideration any upper layer activities that might be on top of it.

Agent Schedules Toolbar

The Agent Schedules toolbar controls which agents you see in the Agent Schedules page. Its fields and buttons are described in the table below.

Note: Until you select a service queue group, service queue, team, or skill mapping, the Agent Schedules page is blank.



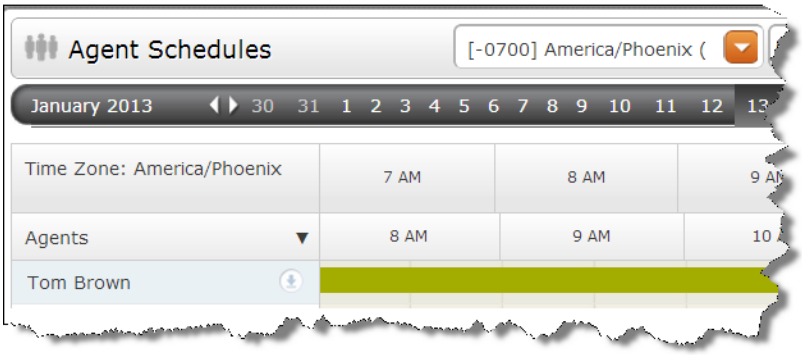
Field/Button	Description
Select Time zone	Choose your time zone preference from the drop-down list. The server's time zone appears in this field by default. When you change this value your selected time zone appears in the Time Zone row. The server's time zone appears in the Agents row.
Select Criteria	Choose the service queue group, service queue, team, or skill mapping to display those agents' schedules. You can type the characters in the group name in the field to find it more easily. This field is not case sensitive. Your selection persists until you change it.
Filter Agents	Filter agents by typing letters in an agent's name. For example, if you type "br" in the field, only names that contain the letters "br" are displayed. This field is not case sensitive.

Field/Button	Description
Actions	This button allows you to modify agents' schedules by inserting activities and trading schedules. It also can take you to today's schedule in one click and discard any changes you made but have not yet saved.
Save	This button saves the changes to the database and updates the production schedule.
Week/Day/Hour	These buttons enables you to display the agent schedules by week, day, or hour. Changes to the date and view persist from session to session.

Time Zones

By default, the Agent Schedules page displays schedules in the server time zone. However, if you select a time zone from the Time Zone drop-down list that is different from the server time zone, a row is added to the schedule grid showing that time zone as well.

> **Example**: The time zone row in the schedule grid below shows that the America/Phoenix time zone has been selected. As a result, a row labeled with the time zone name has been added to the top of the schedule grid, which shows schedule times in the server time zone. The added time zone row is the only place where times in the selected time zone are displayed. Everywhere else in the schedule, the server time zone is used.



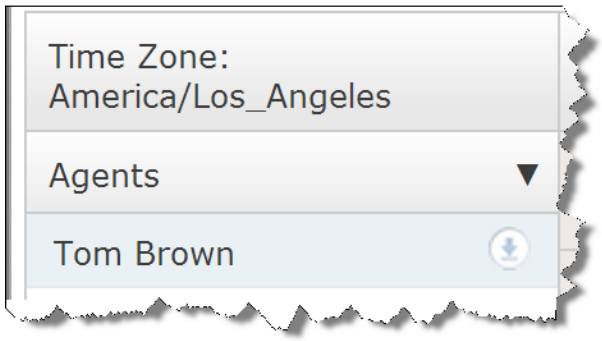
Sorting the List of Agents

Use the triangle icon in the Agents column header to control how the agents are sorted in the schedule grid. You can sort agents in ascending order by the following:

- First name
- Last name
- Arrival time. Agents are sorted according to the first scheduled activity on the schedule, and then by first name and last name. Agents who are available but not scheduled are listed after scheduled agents, and agents who are unavailable and not scheduled are listed last.
- Rank. Agents are sorted based on their ranking in the skill mapping as assigned in the WFM legacy application. Agents of equal ranking are then sorted by first name.
- Company start date. Agents are sorted by their seniority in the company, with the least senior listed first.
- Department start date. Agents are sorted by their seniority in the department, with the least senior listed first.

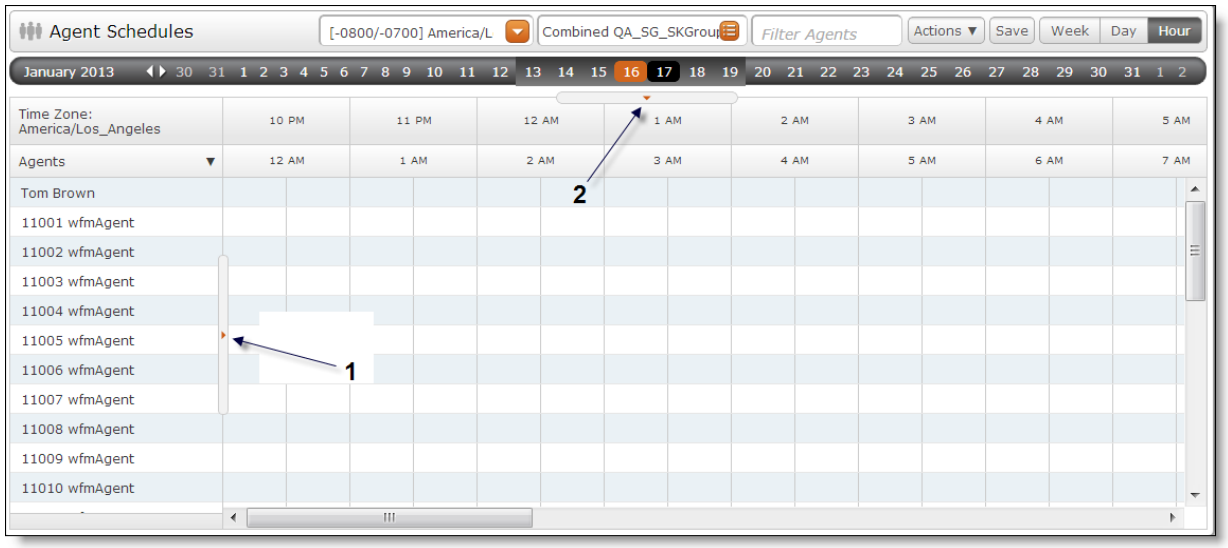
The list of agents can be further refined by pinning an agent to the top of the list. When an agent is pinned, the agent is not subject to any sorting and always appears at the top of the list of agents in the schedule.

You pin an agent by hovering your mouse over the agent's name, and then clicking the pin icon that appears at the right side of the cell (see below). To unpin the agent, click the icon again and the agent is immediately subject to the sorting method used in the list of agents.



Drawers

A drawer is a pane that is opened and closed by clicking a control in the Agent Schedules window.

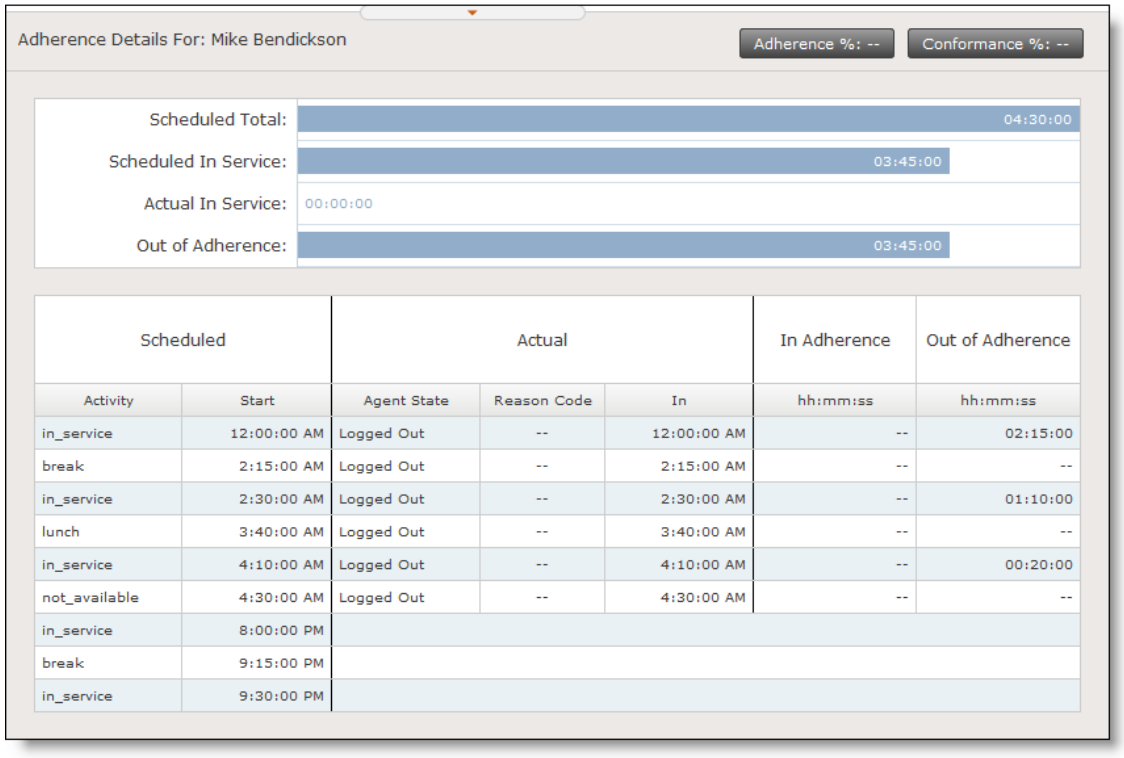


There are three drawers available:

- Agent Adherence Detail drawer, displayed by clicking an agent's name in the Agents list
- Adherence drawer, displayed by clicking the arrow control (number 1 in the figure) to the right of the Agents list
- Coverage drawer, displayed by clicking the arrow control (number 2 in the figure) below the calendar bar

Adherence Details Drawer

The Adherence Details drawer is opened and closed by clicking an agent's name in the Agents list. It shows how well the agent has maintained schedule adherence since the start of the day. Adherence is calculated using agent state data captured from the ACD in real time. For this reason, the values displayed at the top of the Adherence Details drawer (Scheduled Total, Scheduled In Service, Action In Service, and Out of Adherence) reflect the data at the time you opened the drawer, and might differ from the values shown in the detail portion. You can refresh the data in the drawer by closing it and then reopening it.



Scheduled		Actual			In Adherence	Out of Adherence
Activity	Start	Agent State	Reason Code	In	hh:mm:ss	hh:mm:ss
in_service	12:00:00 AM	Logged Out	--	12:00:00 AM	--	02:15:00
break	2:15:00 AM	Logged Out	--	2:15:00 AM	--	--
in_service	2:30:00 AM	Logged Out	--	2:30:00 AM	--	01:10:00
lunch	3:40:00 AM	Logged Out	--	3:40:00 AM	--	--
in_service	4:10:00 AM	Logged Out	--	4:10:00 AM	--	00:20:00
not_available	4:30:00 AM	Logged Out	--	4:30:00 AM	--	--
in_service	8:00:00 PM					
break	9:15:00 PM					
in_service	9:30:00 PM					

You can use the Adherence Details drawer to:

- Compare the agent's scheduled activities with real-time statistics about the agent from the ACD.
- Interpret adherence statistics

The following table describes the Adherence Details drawer fields.

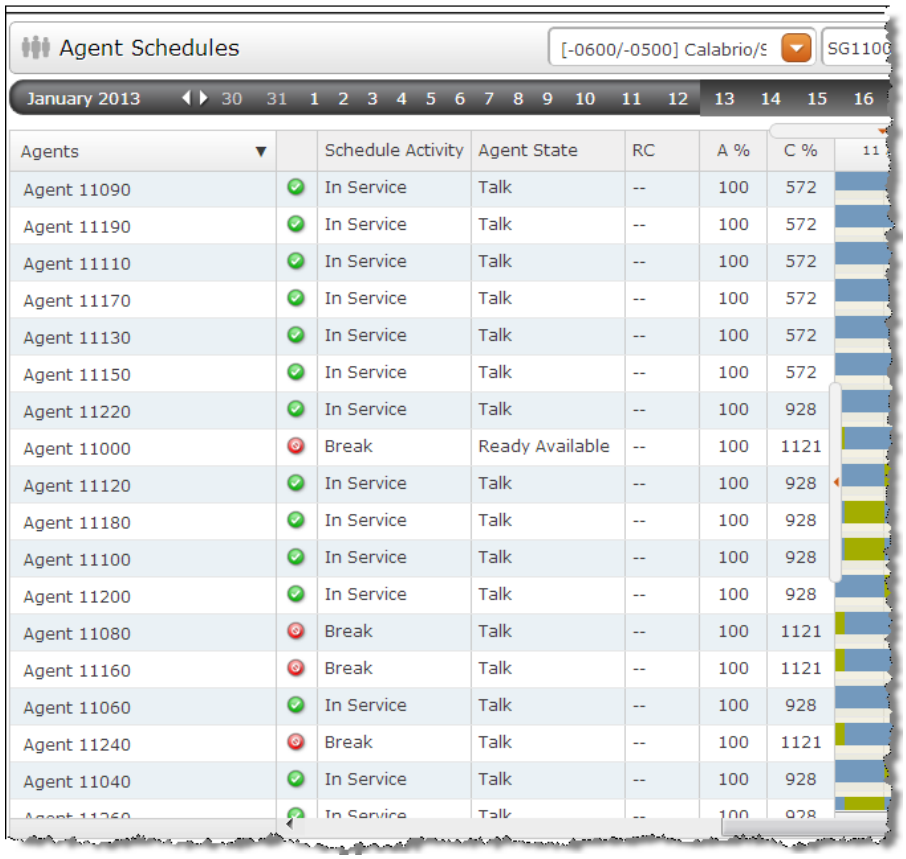
Column	Description
Adherence %	The agent's adherence score. The percentage value is updated every millisecond and displayed as a decimal value. **Note:** This value might differ from the A% value in the Adherence drawer because each drawer refreshes at a different rate, and because the values are rounded in the Adherence drawer.

Column	Description
Conformance %	The agent's conformance score. The percentage value is updated every millisecond and displayed as a decimal value. **Note:** This value might differ from the C% value in the Adherence drawer because each drawer refreshes at a different rate, and because the values are rounded in the Adherence drawer.
Scheduled Total	The total time the agent is scheduled to work for the selected date. If the selected date is the current date, the value is calculated to the current time. This value includes only paid time, not unpaid time.
Scheduled In Service	The total time the agent is scheduled to be in service and available to handle calls for the current date so far. When agents are in service they are either ready to handle a call or handling a call.
Actual In Service	The total time the agent is ready or handling calls so far for the current date.
Out of Adherence	The total time the agent is out of adherence so far for the current date.
Scheduled	A list of scheduled activities and their start times for the selected day.
Actual	• Agent State—The agent's state from the ACD. • Reason Code—The reason code associated with the Out of Service and Not Ready states. • In—The time when the agent entered the agent state.
In Adherence	The time in adherence for each agent state. If the selected date is the current date, the value is calculated to the current time.

Column	Description
Out of Adherence	The time out of adherence for each agent state. If the selected date is the current date, the value is calculated to the current time.

Adherence Drawer

The Adherence drawer is opened and closed by clicking the arrow control to the right of the Agents list. It displays the real-time agent data and adherence and conformance percentages for the agents in the Agents list. When displayed, the data is refreshed every 30 seconds.



Agents		Schedule Activity	Agent State	RC	A %	C %
Agent 11090		In Service	Talk	--	100	572
Agent 11190		In Service	Talk	--	100	572
Agent 11110		In Service	Talk	--	100	572
Agent 11170		In Service	Talk	--	100	572
Agent 11130		In Service	Talk	--	100	572
Agent 11150		In Service	Talk	--	100	572
Agent 11220		In Service	Talk	--	100	928
Agent 11000		Break	Ready Available	--	100	1121
Agent 11120		In Service	Talk	--	100	928
Agent 11180		In Service	Talk	--	100	928
Agent 11100		In Service	Talk	--	100	928
Agent 11200		In Service	Talk	--	100	928
Agent 11080		Break	Talk	--	100	1121
Agent 11160		Break	Talk	--	100	1121
Agent 11060		In Service	Talk	--	100	928
Agent 11240		Break	Talk	--	100	1121
Agent 11040		In Service	Talk	--	100	928

WFM collects real-time agent state data from the ACD and compares it with the agent schedules to calculate the adherence and conformance percentages.

Note: The adherence and conformance percentages in the Adherence drawer are updated every 30 seconds and rounded up to a whole number. These percentages might be different than the percentages displayed in the Adherence Details drawer because each drawer refreshes at a different rate, and the Adherence Details drawer displays the adherence and conformance percentages as a decimal instead of a whole number.

The following table lists the fields in the Adherence drawer.

Field	Description
Agents	The agent's name.
Schedule Activity	The agent's current scheduled activity.
Agent State	The agent's ACD agent state.
RC	The reason code (if any) associated with the agent's ACD state.

Field	Description
A %	The agent's adherence percentage. Adherence is the percentage of time that agents follow their schedules. When calculating adherence, WFM considers scheduled arrival and departure times, breaks, lunches, and time spent on scheduled activities, and compares the actual activity to the scheduled activity each millisecond through the work shift. For example, an agent who is scheduled to be in service at 09:00 and log out at 16:00, and who sticks to that schedule for the entire day, is 100 percent in adherence. Adherence is calculated by the following formula: [(configured schedule adherence minutes – minutes not in adherence) ÷ configured schedule adherence minutes] × 100 Where "configured schedule adherence minutes" is the sum of time scheduled for activities for which the Calculate Adherence column in the Application Manager application is set to Yes. **Note:** If the formula produces a negative number, the field displays a zero.
C %	The agent's conformance percentage. Conformance is the percentage of time an agent works the right amount of time regardless of the time of day the agent works. Schedule conformance does not take arrival and departure times into account. For example, an agent who is scheduled to work from 08:00 to 16:00 but instead works from 10:00 to 18:00 would be conforming, but not adhering, to the schedule. Conformance is calculated according to the following formula: (total time an agent is in a ready, talk, hold, or work state) ÷ (total current scheduled in-service time) ×100 In-service time does not include lunch, breaks, projects, or exceptions.

Coverage Drawer

The Coverage drawer is applicable only to interactive service queues. It is opened and closed by clicking the arrow control below the calendar bar.

The Coverage drawer has four views:

- Coverage: Scheduled (default view)
- Coverage: Shrinkage
- Coverage: Reforecast
- Intraday: Data

You can use the Coverage drawer to see how WFM predicts what the service queue will do for each day and interval. It shows you if your forecast is accurate when compared to the production schedule, and allows you to make post-production schedule changes.

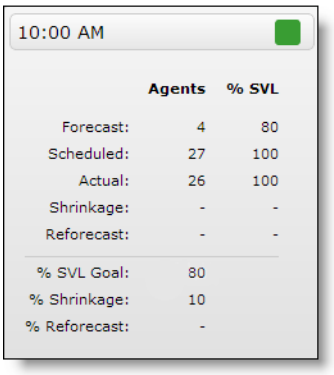
> **Note:** The service level data in all coverage pages are calculated using daily totals in the Hour and Day views, and weekly totals in the Week view.

Based on the metrics displayed in the Coverage drawer, you can edit the schedule to improve the overall service level goal. For example, you could reschedule an agent's break to occur 30 minutes later to resolve a staffing issue. This schedule flexibility can make a big difference towards maintaining the daily service level goal.

The metrics in this drawer update automatically when you change the production schedule.

You can choose what information is displayed in a coverage chart by clicking the metrics buttons at the left of the chart on and off. You can tell if a button has been turned on if the button's border changes from gray to orange.

A popup appears when you click a bar in any of the coverage drawers.

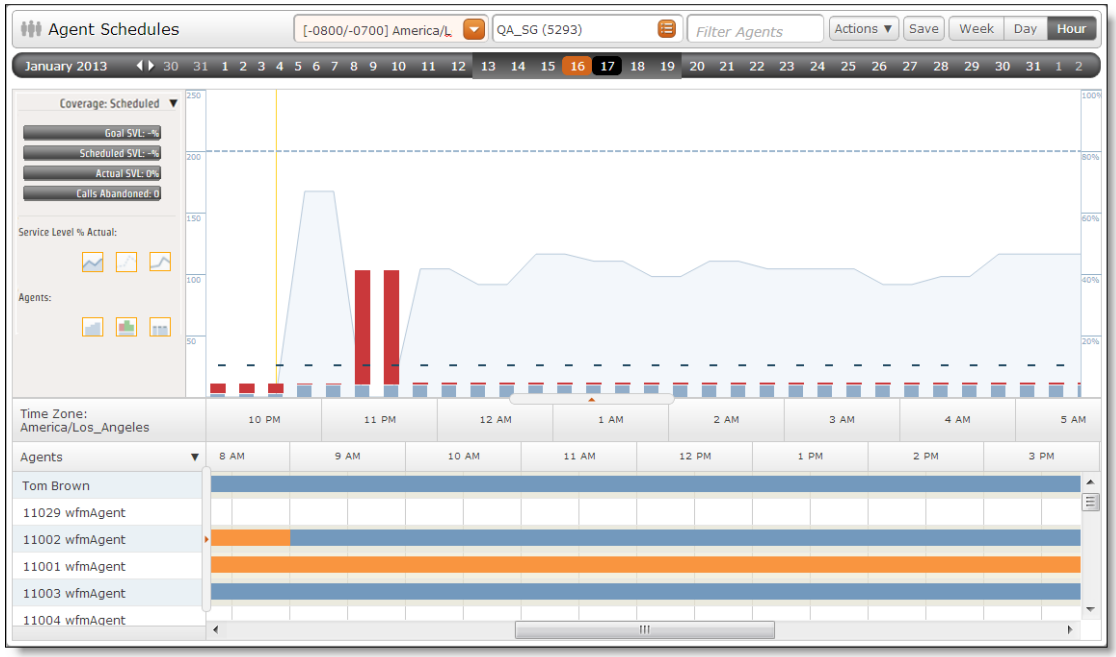


The information in the popup is detailed in the following table.

Field	Description
Forecast	The number of agents and service level percentage forecasted for the interval.
Scheduled	The number of agents and service level percentage scheduled for the interval.
Actual	The actual number of agents and service level percentage for the interval.
Shrinkage	The number of agents after shrinkage is applied to the number of scheduled agents and the service level percentage expected for that number of agents.
Reforecast	The reforecasted number of agents based on the reforecasted number of contacts and reforecasted average handle time given the desired service level goal (percent and seconds).
% SVL Goal	The service level percentage goal.
% Shrinkage	The shrinkage percentage applied to the interval
% Reforecast	The reforecast service level percentage.

Coverage: Scheduled View

The Coverage: Scheduled view is the default view in the Coverage drawer. It shows how well the service queue is meeting its service level goal by comparing real-time data to the production schedule.



The chart can display any or all of following metrics by clicking the appropriate metric buttons on and off:

- % service level scheduled
- % service level goal
- % service level actual
- Agents scheduled
- Agents forecast
- Agents actual

The left panel also displays the following metrics for the selected time period:

- Goal SVL %
- Scheduled SVL %

- Calls Abandoned

Interpreting the Chart

The Coverage: Scheduled view chart displays a stacked bar and line graph for a specific day. The bars and lines are color-coded to aid in interpretation. Each bar represents a 15-minute interval.

The following table describes the colors used in the stacked bar for each interval.

Color	Agents Scheduled
Light Blue	Number of agents scheduled.
Dark Blue	Actual number of agents.
Red	Number of agents forecasted indicates there is a shortage of agents.
Green	Number of agents forecasted indicates there is a surplus of agents scheduled.

To determine the least disruptive time to insert an activity, compare the Agents Scheduled to Agents Forecast in the chart. You can use the gap to determine the number of agents who are available for the planned activity without affecting the coverage.

If there are extra agents available, you can schedule an activity without affecting the service level goal. For example, if the interval from 10:30 to 11:00 has a surplus of 4 agents scheduled, you can schedule a 30-minute meeting with 4 agents during that time.

If there are fewer agents scheduled than the forecast requires, you need to change the agents' schedules to fulfill the schedule requirement.

The following table describes the lines used to represent the different service levels. The chart displays the scheduled, goal, and actual service level score. You can compare the actual service level scores to the service level scheduled and service level goal to see what exactly is happening in the contact center. The chart shows how closely the contact center achieved its service level goal.

Line	Service Level
Light blue line	% Service Level Scheduled
Dashed blue line	% Service Level Goal

Line	Service Level
Dark blue line	% Service Level Actual

Coverage: Shrinkage View

The Coverage: Shrinkage view shows the effect of shrinkage on the schedule's ability to meet the service level. You can adjust the shrinkage percentage to see how that affects meeting the service level goal.

The chart can display any or all of following metrics by clicking the appropriate metric buttons on and off:

- % service level shrinkage
- % service level goal
- % service level actual
- Agents shrinkage
- Agents forecast
- Agents actual

The % Shrinkage field always shows the configured shrinkage percentage, whether the schedule was run with shrinkage applied or not. If a schedule is run with no shrinkage or with

shrinkage rates set to 0, and then the shrinkage percentage is changed after the fact, then the current shrinkage percentage is displayed.

You can adjust that percentage up and down to see how those changes impact the schedule, and use that information to decide if the schedule needs to be adjusted so that the service level goal is met.

To adjust the shrinkage percentage, do the following:

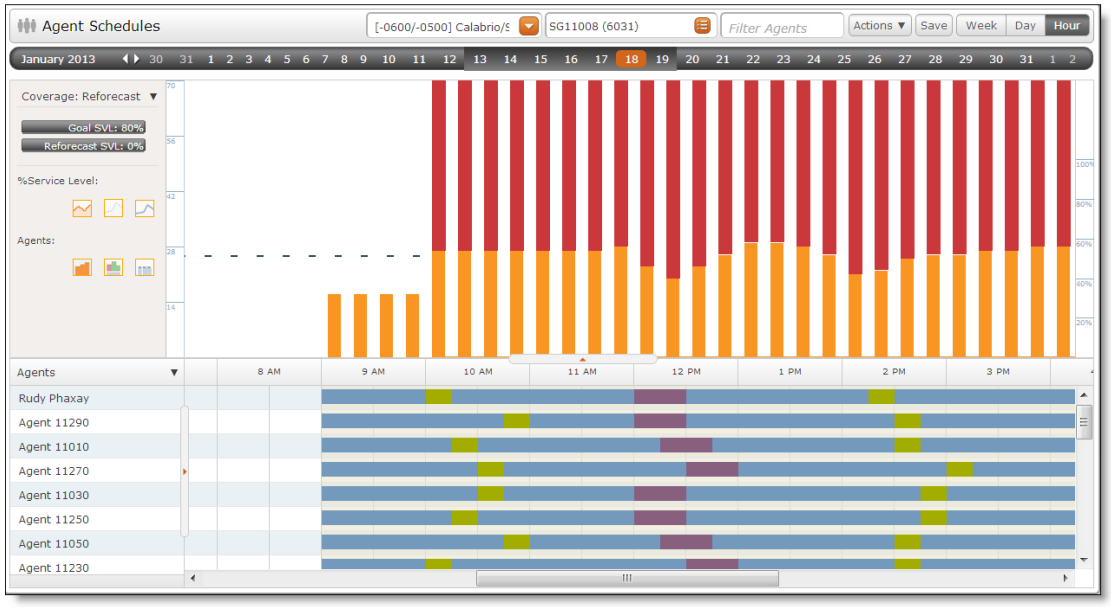
1. In the % Shrinkage field, use the up and down arrows to change the shrinkage percentage to a new value.
2. Click anywhere in the chart to apply the new shrinkage percentage to each interval. The chart updates to reflect the new shrinkage percentage.

The % Shrinkage value reverts to the default value when you refresh the window. You cannot save the revised shrinkage percentage,

Coverage: Reforecast View

The Coverage: Reforecast view shows the impact of reforecast metrics on the coverage data so that schedules can be edited based on what the reforecast metrics say might happen.

> **Note**: The zoom level must be set to Hour in order to display the Reforecast view.



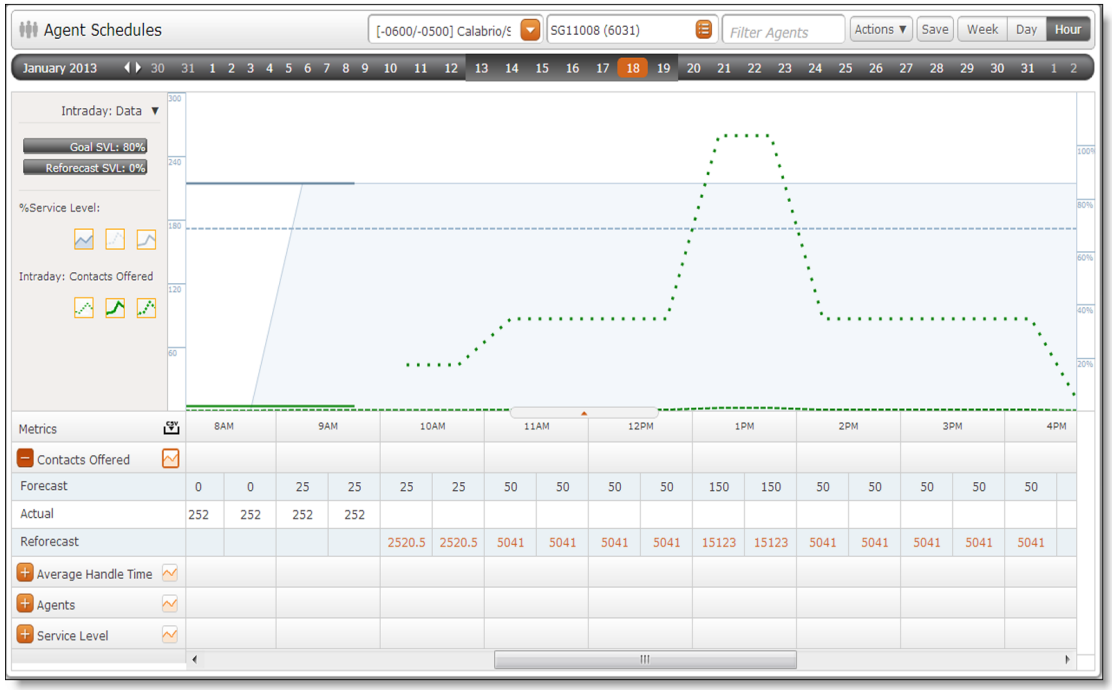
The chart can display any or all of following metrics by clicking the appropriate metric buttons on and off:

- Service level reforecast
- % service level goal
- % service level actual
- Agents scheduled
- Agents reforecast
- Agents actual

Intraday: Data View

The Intraday: Data view shows actual data compared to forecast data in chart form.

Note: The zoom level must be set to Hour in order to display the Intraday: Data view.



The chart can display any or all of following metrics by clicking the appropriate metric buttons on and off:

- % service level—scheduled, goal, and actual (always available)
- Contacts offered—forecast, actual, and reforecast (available when the Show in Graph button on the Contacts Offered drawer is clicked)
- Average handle time—forecast, actual, and reforecast (available when the Show in Graph button on the Average Handle Time drawer is clicked)
- Agents—scheduled, forecast, actual, and reforecast (available when the Show in Graph button on the Agents drawer is clicked)
- Service level—reforecast (available when the Show in Graph button on the Service Level drawer is clicked)

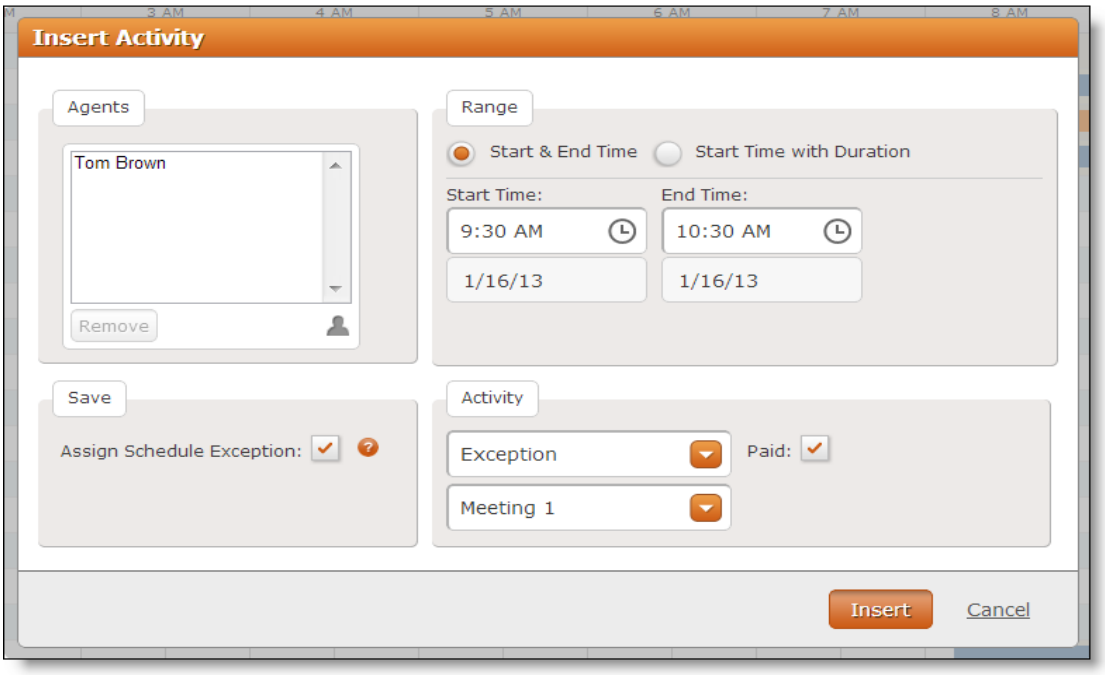
The data used to create the chart is provided in tabular form in drawers at the bottom of the chart. The tabular drawers show the following metrics for 30-minute intervals:

- Contacts offered (forecast, actual, and reforecast)
- Average handle time (forecast, actual, and reforecast)
- Agents (forecast, scheduled, actual, and reforecast)
- Service level (forecast, scheduled, actual, and reforecast)

The tabular data can be exported in CSV format by clicking the CSV download icon to the right of the Metrics label.

Insert Activity

The Insert Activity dialog box allows you to add an activity to the agents' schedule.



The following table describes the fields in the Insert Activity dialog box.

Field	Description
Agents	The agents involved in this activity. You can choose one or more agents from the list. Only agents that are assigned to the team in your Main View appear in this list.
Remove	Deletes one or more selected agents from the list.
Range	Choose a date range option, Start & End Time or Start Time with Duration.
Start Time	The time and date when the activity begins. • Time field—displays 12:00 AM by default. You can type the start time in 5-minute increments in the time field, or you can select the start time from the drop-down list in half-hour increments. • Date field—the date chosen for the activity. Default date is today.

Field	Description
Duration	The duration of the activity in hours and minutes. This option only appears when you select Start Time with Duration.
End Time	The time and date when the activity ends. • Time field—displays 12:00 AM by default. You can type the start time in 5-minute increments in the time field, or you can select the start time from the drop-down list in half-hour increments. • Date field—the date chosen for the activity. Default date is tomorrow.
Select Activity	Select the type of activity to be inserted in the schedule.
Select Type	Select the type of activity. The Select Type field appears only for activities that can be further specified.
Paid	Select the Paid check box if the scheduled activity counts toward the agent's number of hours worked during the week. The check box is selected or cleared by default depending on the activity you select.
Assign Schedule Exception	Enabled only when you select Exception as the activity. Select the check box if you want the schedule exception to be saved to the agent's schedule exception list so that if the schedule is rerun, the exception will appear in the agent's schedule. If you do not select the check box, the exception will be lost if the schedule is rerun.

Inserting an Activity

Follow these steps to insert an activity in one or more agent's schedules. The agent schedule for the desired service queue group, service queue, team, or skill mapping should be displayed.

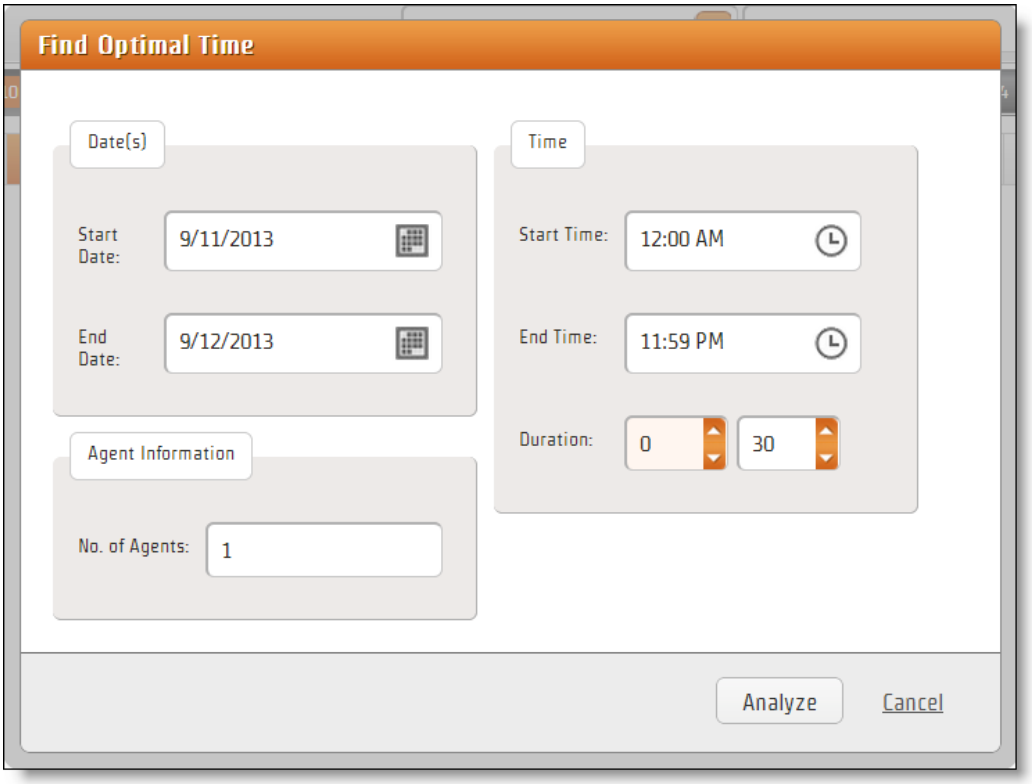
1. In the Agent Schedules page, do one of the following:
   - Choose Actions > Insert Activity from the Agent Schedules toolbar to display a blank Insert Activity dialog box.

- Right-click the desired agent's scheduled activity on the schedule and select Insert to display the Insert Activity dialog box with information for the scheduled activity entered.

2. Complete the fields in the dialog box as desired and click Insert to insert the new activity in the agent's schedule.
3. Click Save to save the schedule change.

Find Optimal Time

The Find Optimal Time dialog box helps you find the best time in the agent schedule to insert an activity so that it has as little impact on the service level as possible.

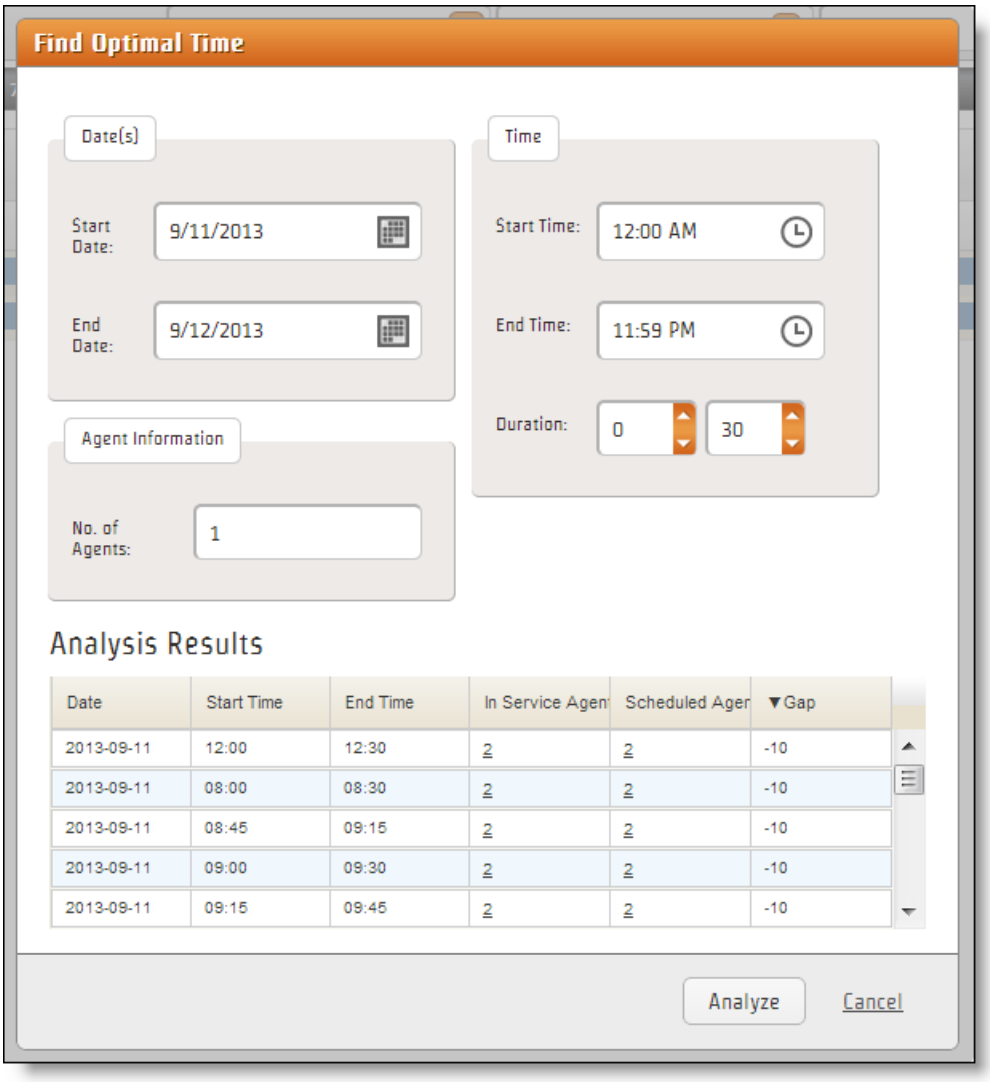


The following table describes the fields in the Find Optimal Time dialog box.

Field	Description
Start Date	Enter the start date of the date range in which the activity should take place. By default this is the first day of the week whose schedule you are viewing. You can choose a date within a week of this date.
End Date	Enter the end date of the date range in which the activity should take place. By default this is the end of the week whose schedule you are viewing. You can choose any date within a week of the Start Date.
Start Time	The earliest time at which the activity can start.
End Time	The latest time at which the activity can start.
Duration	The amount of time the activity should last.
No. of Agents	The number of agents you want to perform the activity.

Finding an O ptimal Time

After completing the fields in the Find Optimal Time dialog box, click Analyze. WFM finds the best times for the activity and lists them in the Analysis Results flyout.



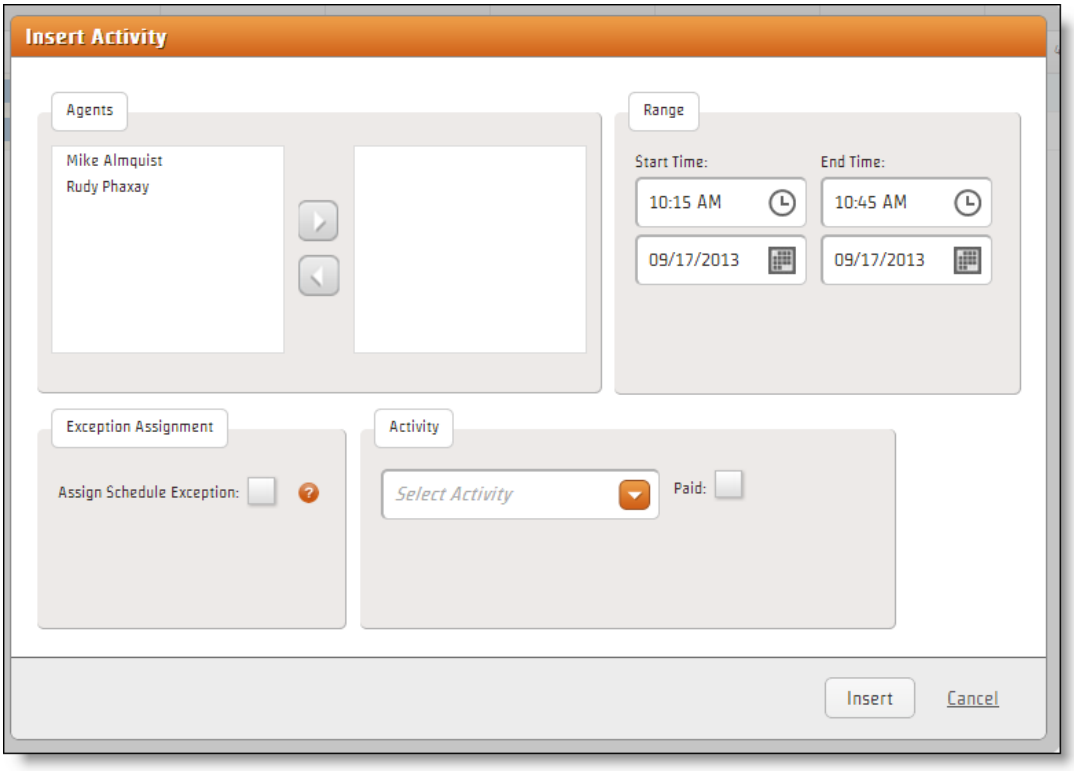
The Analysis Results table lists candidate time slots for the activity. The fields in the table are the following:

Field	Description
Date	Date of the time slot.
Start Time	Start time of the time slot.
End Time	End time of the time slot.

Field	Description
In Service Agents	The number of agents who are in service the entire duration of the time slot.
Scheduled Agents	The number of agents who are scheduled during the time slot. They can be doing anything: in service, on break, in a meeting, and so on.
Gap	The positive or negative gap between the number of forecasted agents and actual scheduled agents. A positive number indicates overstaffing, and a negative number indicates understaffing.

Use the gap value to help you decide which time slot to use for the activity.

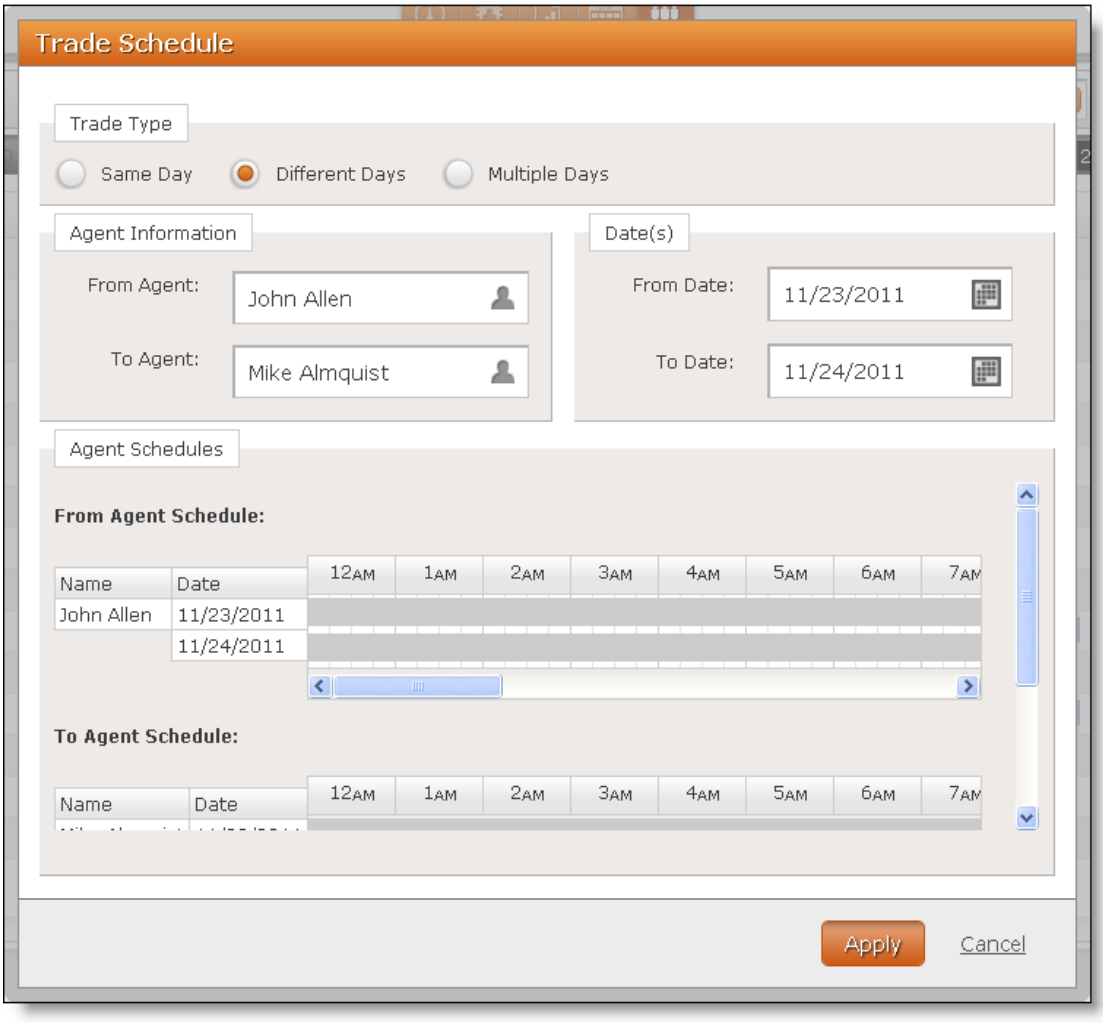
Once you decide, click the hyperlinked number in the In Service Agents or Scheduled Agents fields in your selected time slot. This opens the Insert Activity dialog box with the Range fields autofilled based on your time slot selection.



The names of the agents who were the In Service Agents or Scheduled Agents in the Analysis Results table are listed in the Agents pane. Select the agents you want to perform the activity, complete the Exception Assignment and Activity sections, and click Insert and then Save to add the activity to those agents' schedules.

Trade Schedule

The Trade Schedule dialog box allows you to trade schedules between two agents.



You can trade schedules for the same day, different days, or multiple days. When trading agent schedules, note that when a schedule crosses midnight, the agent is scheduled to start work the day the schedule began.

Note: If another supervisor trades agent schedules through the legacy application, you will not be informed. We recommend that you approve trade requests using the Agent Schedules application.

The following table describes the fields in the Trade Schedule dialog box.

Field	Description
Trade Type	The type of trade for this action. Your options are: • Same Day—trade schedules on the same day. When you choose this option, the Schedule Date field appears. This option is selected by default. For example, you can use this option to trade Agent A's 07:00–15:00 schedule with Agent B's 09:00–17:00 schedule on the same day. • Different Days—trade schedules on different days. When you choose this option, the From Date and To Date fields appear. For example, you can use this option to trade Agent A's scheduled Thursday with Agent B's scheduled Friday. • Multiple Days—trade multiple day schedules. When you choose this option, the Start Date and End Date fields appear. For example, if you chose the 1/23/2012 in the Start Date and 1/27/2012 in the End Date then you will trade Agent A's Monday (23rd) 07:00–15:00 schedule with Agent B's Monday (23rd) 09:00–17:00 schedule plus Tuesday (24th), Wednesday (25th), Thursday (26th) and Friday (27th).

Field	Description
Agent Information	The agents' involved in the trade. • From Agent—the first agent whose schedule you want to trade • To Agent—the second agent whose schedule you want to trade Only agents who are assigned to the team in your Main View appear in the From Agent or To Agent list.
Dates	The dates involved in the trade. The possible trade dates are: • Schedule Date—the date you want to trade schedules. Type the date, in mm/dd/yyyy format, or click the field and choose the date from the Calendar popup. • From Date—the first scheduled date involved in the trade. • To Date—the second scheduled date involved in the trade. • Start Date—the first day of the work shift that you want to trade. • End Date—the last day of the work shift that you want to trade.
Agent Schedules	The schedule for both agents displayed side-by-side allows you to compare the agents' schedules before you click Apply. • From Agent Schedule—the first agent's current schedule • To Agent Schedule—the second agent's current schedule

Trading Schedules Between Agents

To trade schedules between two agents:

1. Click actions > Trade Schedule to display the Trade Schedule dialog box.
2. Complete the fields.
3. Click Apply. The traded schedules are applied immediately to the production schedule.

Modifying Schedules U sing Drag and Drop

You can change the start and end times of an agent's schedule and move scheduled activities within a day's schedule using drag and drop techniques.

With the schedules displayed in Hour view, double-click the agent's schedule bar to initiate drag and drop. When you do so, a duplicate schedule bar appears below the original bar.

- Use your cursor to drag the ends of the duplicate bar left and right to change the start and end times.
- On the original bar, use your cursor to drag a scheduled activity to a new time.

You must click Save to save the changes you have made to the schedule. If you want to cancel changes you have made but not yet saved, click the browser Refresh button to reload the page with the original schedule.

P lanning

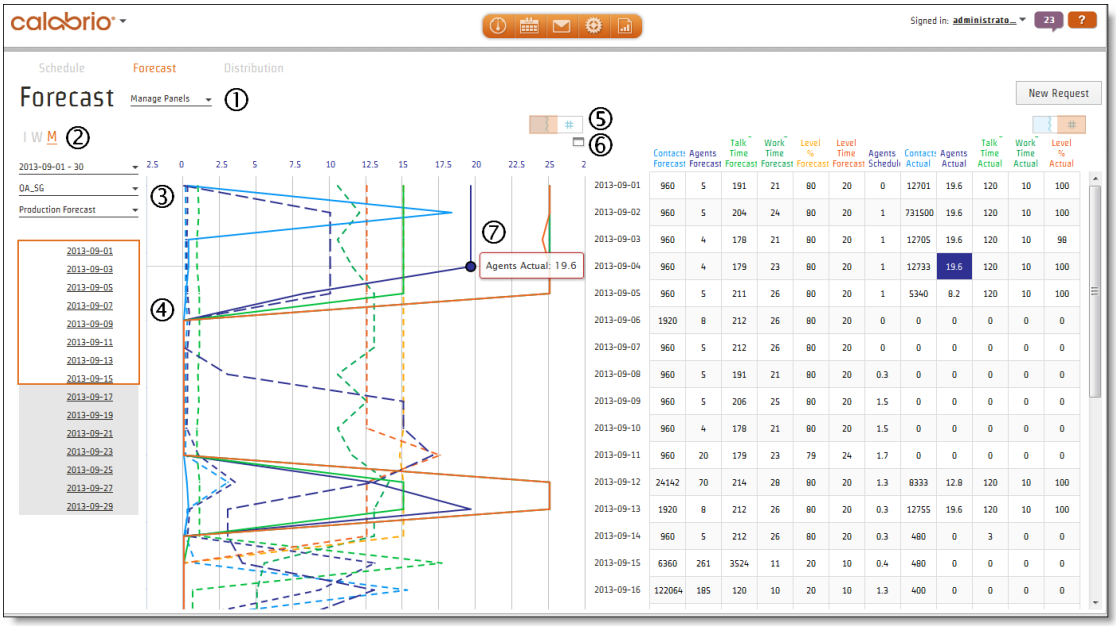
The Planning application is used to generate distributions, forecasts, and schedules.

The scheduling process follows these steps:

- Historical data is used to generate a distribution
- The distribution and historical data is used to generate a forecast
- The forecast is used to create a schedule

Navigating the Planning Page

The Planning page displays forecasts and distributions in both tabular and graphical format.

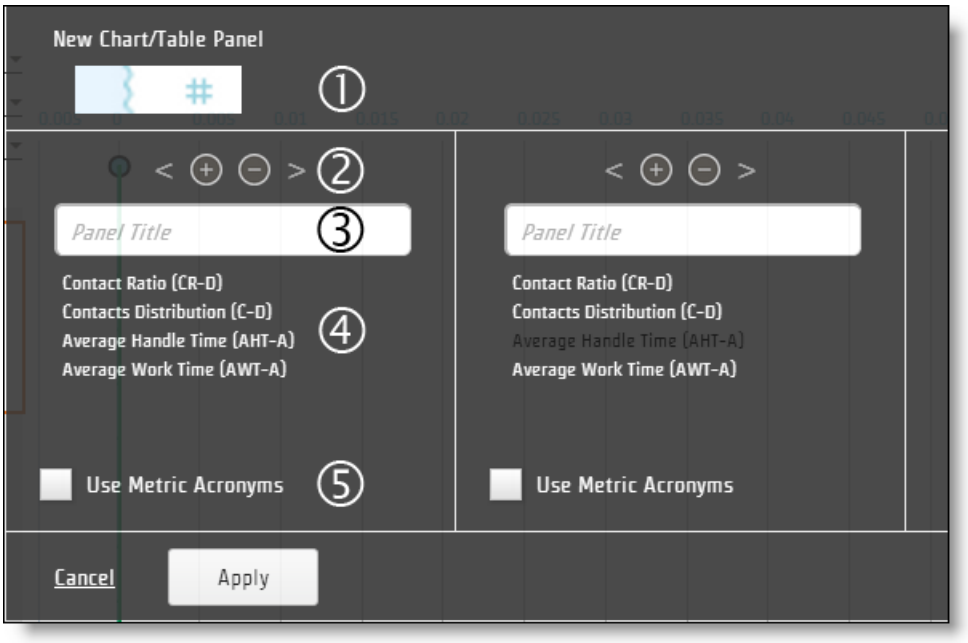


The following table describes each numbered area in this figure of the Forecast page.

Callout	Description
1	Click Manage Panels to configure the graphs and tables displayed on the page. See Panel Manager for more information.
2	Control the zoom level here. click I, W or M to view your data by: • Interval (I). Data is displayed by half-hour interval for one day. • Week (W). Data is displayed in 3-hour intervals for 7 days. • Month (M). Data is displayed by day for each day of the month. The zoom level control is found only on the Forecast view.
3	Select the date (forecasts) or day (distributions), service queue, and the specific forecast or distribution you want to view from these three drop-down lists.
4	The long view slider shows the range of data you are viewing. Slide it up and down to change the dates viewed.
5	Graph/table control. Click the left button (graph) or right button (table) to toggle between the two views of the data in the panel.
6	Horizontal graph button. Click this button to display the graph in horizontal format rather than the default vertical format.
7	Data points. Select a point on a line in the graph and the corresponding value in the table is highlighted (the reverse is also true: select a value in the table and the corresponding point on a line is highlighted). The lines are the same color as the column header of the data associated with it in the table. A hover text box displays information about the data point. You can drag data points left and right to change their values. See Editing a Forecast or Distribution for more information.

Panel Manager

Use the Panel Manager to configure what is displayed on a forecast or distribution page.



The following table describes each numbered area in this figure of the Panel Manager.

Callout	Description
1	Click the button to add a new panel.
2	These four icons allow you to move, copy, and delete a panel. From left to right, they are: • Move this panel to the left • Add a copy of this panel • Delete this panel • Move this panel to the right
3	Enter a name to identify the panel.
4	This is a list of all the metrics available to be displayed in the panel. They are selected if in white text, and deselected when the text is black (see the panel to the right, with one deselected metric).

Callout	Description
5	Select this check box to use metric acronyms instead of the full names as table column headers. Note that selecting this for a graph has no effect on the graph, it applies only to tables.

Editing a Forecast or Distribution

Forecasts and distributions can be edited in a number of ways.

Dragging Lines in the Graph

You can drag the data points on the lines in the graph to increase or decrease the value that data point represents.

> **Note**: You cannot drag lines in a graph that is displayed horizontally.

- Forecasts: You must be displaying the data at the Interval (I) zoom level in order to edit the forecast data. Note that you cannot edit any actual data (such as the Contacts Actual) or the number of agents scheduled (Agents Scheduled).
- Distributions: Distributions are displayed only at the Interval zoom level, so can be edited. Note that you cannot edit the contact ratio data, but you can edit the other values in the distribution.

Editing Data in the Table

You can edit fields in the table. Changes you make are reflected immediately in the graph.

- Double-click a table cell to edit it. Tab out of the cell or press Enter for the new value to "stick".
- Press Tab to move cell to cell to the right.
- Press Ctrl+Tab to move cell to cell to the left.
- Press Enter to move down one cell at a time.

Copying and Pasting Data in the Table

You can copy and paste data in the table using standard Windows shortcut keys or a right-click menu.

- Click and drag with your mouse to select specific rows and columns in the table, or Ctrl + A to select the entire table.
- Use Ctrl + C to copy the selected cells to the clipboard in TSV (tab separated value) format. This action copies both editable and read-only columns. You can also right-click on your selection, and choose Copy or Copy with Headers.
- Use Ctrl + V to paste the contents of the clipboard into table cells. The data you are pasting can be in TSV or CSV format. You can also right-click and choose Paste. You can paste into a specifically chosen group of cells, or just select the cell that becomes the upper left corner of your pasted data. The data is pasted into the selected cells, unless the selected column is read-only. You cannot paste copied data into read-only columns. If the copied data is too big to fit into the selected paste area, paste expands the selection to the size of the data on the clipboard. For example, if you select a 2 × 2 area but the data on the clipboard is 3 × 3, then it will paste 3 × 3. The pasted data is highlighted in the table.

Applying an Adjustment Factor to a Column

You can apply an adjustment factor to edit every value in a forecast table column by the same percentage. For example, to increase the values in a column by 20%, you apply an adjustment factor of 1.2.

To apply the adjustment factor, double-click the column header and enter the desired value in the dialog box. The dialog box is available only for columns you can edit this way. This feature is not available for distributions.

Distributions

A distribution consists of one week's worth of contact data for every 30-minute interval of the day. The data includes the following:

- Percentage of the day's total contacts (contact ratio)
- Number of contacts received (contacts distribution)
- Average talk or processing time (average handle time)
- Average after contact work time (average work time)

The distribution determine the general pattern of contacts for a service queue, which days and hours have a high volume and which have a low volume.

This is how WFM generates a distribution:

1. WFM calculates the average number of contacts received in the reference period for each schedule interval for every day of the week selected in the distribution request. Days with special events are disregarded.

   > **Example**: To calculate the average contact volume for the 08:30 to 09:00 interval on Monday, WFM takes the sum of the volume for the 08:30 to 09:00 interval for each Monday in the reference period and divides the total by the number of Mondays in the reference period.

2. WFM then divides the result for each half hour by the average number of contacts received for the entire day to determine the percentage of the day's contacts that arrive during this interval.
3. WFM calculates the average talking time (interactive service queues) or processing time (non-interactive service queues) and after contact work time values per contact for each half hour.

   > **Example**: To calculate the average talking time/processing time for the 08:30 to 09:00 interval on Monday, WFM takes the sum of talking time/processing time for each contact between 09:00 and 09:30 for each Monday in the reference period and divides the total by the number of contacts to determine the average talking time/processing time. WFM uses the same method to calculate average work time.

The future does not always repeat the past. Future events can cause a contact distribution to change. If you know about upcoming events that might affect a distribution, you can use the edit the distribution to account for those events. For any half-hour interval, you can change the number of contacts likely to arrive, the average talk or processing time, and the average after contact work time. See Editing a Forecast or Distribution for more information.

Guidelines for Generating a Distribution

Choosing an appropriate reference period is important for generating a distribution suitable for your forecast period.

You can generate a distribution once and reuse it for every forecast or generate a new distribution every time you generate a forecast. A distribution and forecast are linked

automatically—a service queue can only have one production distribution and one production forecast at any given time.

The type of distribution you generate depends on the type of service queue for which you are generating it. Use the following guidelines when generating a distribution.

- If your daily or weekly contact data fluctuate wildly, choose a longer reference period. If your contact data is fairly stable, choose a shorter reference period.
- If your contact data is fairly stable or seasonal, choose a longer reference period from the same period last year.
- If you have at least a year's worth of historical data and your business and routing patterns have not changed dramatically, use a reference period from a year earlier that is similar to the forecast period. This will include seasonal patterns.
- If you have less than a year's worth of historical data or your contact center conditions have changed dramatically, identify a more recent period that is likely to have contact data that is similar to the forecast period.
- If the contact data is reasonably stable throughout the year, you might go several months without having to generate a new distribution.
- If the contact data varies frequently or shows seasonal variation, you might need to regenerate your distribution at least once a month or every time you create a forecast.

Note: Distributions ignore dates within your reference period that have special events assigned to them, and dates that are tagged as closed days.

Managing Distributions

Use the Distribution Requests page (Schedules and Planning > Planning > Distribution > New Request) to do the following:

- Submit a production distribution request
- Submit an existing named distribution request
- Submit a new named distribution request

The production distribution is used by default to generate a forecast (although you can specify to use a named distribution instead). There can be only one production distribution.

In contrast, there can be many named distributions. Named distributions are used to analyze how different conditions affect contact volumes and agent schedules. A named distribution can

be generated with historical data like a production distribution is, but it can also be generated without any historical data and then populated manually.

> **Note**: If you are confident that the contact volume and distribution at your contact center are stable, then you only need to generate one distribution and one forecast, and you do not need to use named distributions.

Generating a Production Distribution

To generate a production distribution, follow these steps:

1. On the Distribution Request page, select the Submit a production distribution request option.
2. Select one or more service queues. The available service queues listed are those that do not have the "Do not generate forecasts or schedules for this service queue" check box selected on the Service Queues page.
3. Enter the start date and end date of the desired reference period. The reference period should have historical data that closely resembles the dates for which you want to generate a forecast. There should be data for every selected day of the week in your reference period. If there is no data, WFM will fill those periods with zeros.
4. Select the days of the week you want to calculate a distribution for. By default every day of the week is selected.
5. Decide if you want the service queue standard times (Average Talk Time and Average After Contact Work Time) to be updated based on this distribution.
6. Schedule when you want the request to run. By default the request is run immediately.
7. Click Run.

Once your request has run successfully, you can view the distribution and edit it as needed.

To view the distribution, follow these steps:

1. On the Planning page, select Distribution.
2. Select the service queue you ran the distribution for.
3. Select Production Distribution. The distribution appears in both tabular and graphical form.
4. Select the day of the week you want to view from the drop-down list, or scroll the

displayed data up or down and click the black bar at the bottom to view the next day's data or the black bar at the top to view the previous day's data.

Generating a Named Distribution

Use the Distribution Request page to submit a named distribution request. The request can generate a new named distribution or reuse an existing named distribution name to overwrite that named distribution with new data.

To generate a named distribution, follow these steps:

1. On the Distribution Request page, select the desired option: run a new named distribution or reuse an existing named distribution.
2. Select a service queue. Note that while you can select multiple service queues for a production distribution, you can select only one service queue for a named distribution.
3. Enter a unique name for the named distribution if this is a new request, or select the existing named distribution name if you are reusing an existing named distribution name.
4. Enter the start date and end date of the desired reference period. The reference period should have historical data that closely resembles the dates for which you want to generate a forecast. There should be data for every selected day of the week in your reference period. If there is no data, WFM will fill those periods with zeros.
5. Select the days of the week you want to calculate a distribution for. By default every day of the week is selected.
6. Decide if you want the service queue standard times (Average Talk Time and Average After Contact Work Time) to be updated based on this distribution.
7. Schedule when you want the request to run. By default the request is run immediately.
8. Click Run.

Once your request has run successfully, you can view the distribution and edit it as needed.

To view the distribution, follow these steps:

1. On the Planning page, select Distribution.
2. Select the service queue you ran the distribution for.
3. Select the named distribution. The distribution appears in both tabular and graphical form.

4. Select the day of the week you want to view from the drop-down list, or scroll the displayed data up or down and click the black bar at the bottom to view the next day's data or the black bar at the top to view the previous day's data.

Managing a N amed Distribution

Once a named distribution is run, there are a number of actions you can take with it besides editing it. These actions are controlled by the buttons in the upper right corner of the Distribution page.

With these buttons, you can:

- Save the edited production or named distribution.
- Rename the named distribution. This function does not copy the distribution, but changes the name of this distribution. Once changed, you will not see the old name in any list of named distributions for this service queue.
- Delete the named distribution.
- Copy the named distribution to production. This function overwrites the data in the existing production distribution with the data from this named distribution. For example, if the named distribution has data only for Monday and Tuesday, but the production distribution had data for every day of the week, after the copy, the production distribution will also contain data only for Monday and Tuesday.
- Export the data in the production or named distribution as a CSV-format file named export.csv for use in a spreadsheet application such as Excel. The data exported is that of the currently-displayed day. If you want to export the data for the entire week, you must do it one day at a time.

Data in the Distribution Summary

The data in the Distribution Summary row is calculated as described in the following table.

Column	Summary Calculation
Contact Ratio	Total of column values
Contacts Distribution	Total of column values
Average Handle Time	Weighted average by contact
Average Work Time	Weighted average by contact

Forecasts

A forecast is a prediction of the number of contacts that a contact center will receive over a specific period of time.

WFM uses historical contact data to generate a distribution, then uses the historical data and the distribution to generate a forecast. The forecasts are then used to create a schedule.

The Forecasting Process

To create a forecast, you must complete these tasks.

Select a Reference Period

WFM uses historical data to project future requirements. You need to identify the reference period with the historical data that most closely resembles the period for which you want to generate a forecast.

A reference period should reflect any weekly or seasonal patterns that are likely to occur during the forecast period. Choosing a reference period from a year prior to the forecast period often provides the best reflection of weekly and seasonal patterns.

To view the historical data available to you for the service queue and the reference period you are considering, use the View and Edit Historical Data page.

Generate a Distribution

Generate a distribution for the service queue and reference period you selected.

Edit the Distribution

If needed, edit the distribution. For example, if you expect the contact volume to be lower on a certain day of the week in your forecast period, you can decrease the contact volume on that day in the distribution.

> **Note**: If a special event was assigned to that day, then WFM normalizes the contact volume so that distributions are more accurate. There is no need for you to manually adjust the distribution in that case.

Generate the Forecast

When you launch the forecast request, WFM performs these steps:

1. Applies any special event adjustments you assigned for the service queue in the historical reference period.
2. Generates the average contact volume for each day of the week using data from the reference period.
3. If you opted to use trends, determines the trend percentage by day and adjusts the volume projections accordingly.
4. Adjusts the volume projection for each day by the adjustment factor.
5. Applies the contact ratios from the distribution for each interval in the day. For non-interactive service queues using even or proportional redistribution during closed hours, contacts are redistributed
6. for non interactive service queue with even/proportional redistribution during closed hours, it will redistribute contacts to be handle appropriately. else contacts to be handled is taken from contacts arriving if is during service queue open hours or contacts to handle is 0 if service queue is closed during that interval
7. Multiplies the projected contacts for each interval by the average handling time to estimate the amount of agent handling time required.
8. Performs statistical analysis of the agent handling time estimates and the service level goals to determine the number of agents required per interval.

Note: If there is a date with a firm date association within the forecast period, WFM uses the volume from the firm date association reference date, but the distribution of that contact volume by interval for the day comes from the distribution.

Review the F orecast

If you do not think the forecast values are on target, edit the forecast.

Managing Forecasts

Use the Forecast Requests page (Schedules and Planning > Planning > Forecast > New Request) to do the following:

- Submit a production forecast request
- Submit an existing named forecast request
- Submit a new named forecast request

There can be only one production forecast, but there can be many named forecasts.

Generating a Production Forecast

To generate a production forecast, follow these steps:

1. On the Forecast Request page, select the Submit a production forecast request option.
2. Select the start and end dates of the period the forecast will cover.
3. Select the service queue type.
4. Select the one or more service queues the forecast is for. The available service queues are all of the service queue type you selected and that do not have the "Do not generate forecasts or schedules for this service queue" check box selected on the Service Queues page.
5. Select the distribution to be used. If you selected multiple service queues, this must be the production distribution. If you selected one service queue, then this can be either the production distribution or a named distribution. Whichever type of distribution you choose, it must have been run for the service queues you selected.
6. If you want to use trends to calculate the forecast, select the Trends check box. See Using Trends in Forecasting for more information on how the trend is calculated.
7. If you selected the Trends check box, enter two reference ranges to be used to calculate the trend. Range 1 must be before Range 2, and the two ranges cannot overlap. If you did not select the Trends check box, enter the start and end dates of the reference period.
8. Choose the source of the contact handling time metrics used to calculate the forecast. You can use the average talk time and average after contact work time values calculated by the distribution you selected, or the values entered on the Service Queues page of each of the service queues this forecast is for.
9. If desired, enter an adjustment factor to adjust the forecasted contact volume up or down. The default value is 1.0, which means no change.
10. **For Interactive service queues**: If you want to configure the service level objective by intervals, select the Service Level Objectives check box. When you select it, a table is displayed that contains service level objective values. If the forecast is for a single service queue, the table shows the standard service level objective configured on that service queue's Service Queues page. If the forecast is for multiple service queues, the table shows a default service level objective of 80% and 20 seconds. You can then modify the service level percentage by interval as desired. **For non-interactive service queues**: If you want to configure the handling threshold, select the Service Level

Objectives check box. When you select it, the Handling Threshold field is displayed. Enter the number of minutes (from 0 to 4320) in which contacts must be handled.

11. Schedule when you want the request to run. By default the request is run immediately.
12. Click Run.

Once your request has run successfully, you can view the forecast and edit it as needed.

To view the forecast, follow these steps:

1. On the Planning page, select Forecast.
2. Select the date of the forecast.
3. Select the service queue you ran the forecast for.
4. Select Production Forecast. The forecast appears in both tabular and graphical form.

Generating a Named Forecast

Use the Forecast Request page to submit a named forecast request. The request can generate a new named forecast or reuse an existing named forecast name to overwrite that named forecast with new data.

To generate a named forecast, follow these steps:

1. On the Forecast Request page, select the Submit a new named forecast request option.
2. Select the start and end dates of the period the forecast will cover.
3. Select the service queue type.
4. Select the service queue the forecast is for. The available service queues are all of the service queue type you selected and that do not have the "Do not generate forecasts or schedules for this service queue" check box selected on the Service Queues page.
5. Enter a unique name for the forecast.
6. Select the distribution to be used. This can be the production distribution or a named distribution for the selected service queue.
7. If you want to use trends to calculate the forecast, select the Trends check box.
8. If you selected the Trends check box, enter two reference ranges to be used to calculate the trend. Range 1 must be before Range 2, and the two ranges cannot overlap. If you did not select the Trends check box, enter the start and end dates of the reference period.

9. Choose the source of the contact handling time metrics used to calculate the forecast. You can use the average talk time and average after contact work time values calculated by the distribution you selected, or the values entered on the Service Queues page of the service queue this forecast is for.
10. If desired, enter an adjustment factor to adjust the forecasted contact volume up or down. The default value is 1.0, which means no change.
11. **F or Interactive service queues**: If you want to configure the service level objective by intervals, select the Service Level Objectives check box. When you select it, a table is displayed that contains the standard service level objective configured on that service queue's Service Queues page. You can then modify the service level percentage by interval as desired. **F or non-interactive service queues**: If you want to configure the handling threshold, select the Service Level Objectives check box. When you select it, the Handling Threshold field is displayed. Enter the number of minutes (from 0 to 4320) in which contacts must be handled.
12. Schedule when you want the request to run. By default the request is run immediately.
13. Click Run.

Once your request has run successfully, you can view the forecast and edit it as needed.

To view the forecast, follow these steps:

1. On the Planning page, select Forecast.
2. Select the date of the forecast.
3. Select the service queue you ran the forecast for.
4. Select the named forecast. The forecast appears in both tabular and graphical form.

Note: In previous versions of WFM, you were able to select to view and edit a named forecast/named distribution combination. If you upgraded to the current version of WFM from earlier versions, those named forecast/named distribution combinations are now listed in the Forecast drop-down list as <forecast name>-<distribution name>.

Using Trends in Forecasting

When you choose to generate a forecast with trends, WFM calculates an annual growth rate in contact volume from two reference periods that do not overlap.

The choice of reference periods is an art that should take into account any seasonal fluctuations in the historical data. If historical data is seasonal, it is best to use the same portions of two different years to determine the trend.

Trends are exponential. This means that if the contact center experiences 5% growth per year in contact volume, then in two years, it will experience 10.25% growth (from 1.05 squared, which is 1.1025).

For each of the two trend reference periods, the average contact volume for each day of the week is computed, as well as the median date for each day of the week. The median date for a day of the week is the middle instance of that day within the date range. For example, if there are five instances of Wednesday in the reference period, the median Wednesday is the third instance of that day.

Additionally, for each reference period, an overall average contact volume and mean date is computed. Then, the results from the two reference periods are combined to produce a growth rate and growth duration. From this the annual growth rate is computed.

For example, suppose the two reference periods result in the following average contact volume and mean dates:

Reference Period 1 (2012-07-01 through 2012-08-04)

Day of the Week	Median Date	Average Contact Volume
Sunday	2012-07-15	400
Monday	2012-07-16	3000
Tuesday	2012-07-17	2800
Wednesday	2012-07-18	2600
Thursday	2012-07-19	2400
Friday	2012-07-20	2200
Saturday	2012-07-21	2000
OVERALL	**2012-07-18**	**2200**

Reference Period 2 (2013-01-01 through 2013-02-04)

Day of the Week	Median Date	Average Contact Volume
Sunday	2013-01-20	425
Monday	2013-01-21	3126
Tuesday	2013-01-15	2940
Wednesday	2013-01-16	2730
Thursday	2013-01-17	2544
Friday	2013-01-18	2310
Saturday	2013-01-19	2095
OVERALL	**2013-01-18**	**2310**

For each day of week and for the overall averages WFM computes the growth factor and growth period (in years, using 365.2425 as the length of one year). Finally, WFM computes the annual growth rate from the formula:

$$\text{Annual growth factor} = \text{growth factor}^{(1-\text{growth period})}$$

where the growth factor and growth period are computed from the two trend reference data periods.

Computation of the annual growth factor

Day of the Week	Growth Period (Days)	Growth Period (Years)	Growth Factor	Annual Growth Factor
Sunday	189	0.517464	1.0625	1.124296
Monday	189	0.517464	1.0420	1.082753
Tuesday	182	0.498299	1.0500	1.102867
Wednesday	182	0.498299	1.0500	1.12867

Day of the Week	Growth Period (Days)	Growth Period (Years)	Growth Factor	Annual Growth Factor
Thursday	182	0.498299	1.0600	1.124047
Friday	182	0.498299	1.0500	1.102867
Saturday	182	0.498299	1.0475	1.097604
OVERALL	**184**	**0.503775**	**1.0500**	**1.101694**

These annual growth factors (by day of the week, and by the overall factor if there was no data for a particular day of week) form the forecasting trend.

Data in the Forecast Summary

The data in the Forecast Summary row is calculated as described in the following table.

Column	Summary Calculation
Contacts Forecast	Total of column values
Agents Forecast	Weighted average by period duration
Average Talk Time Forecast	Weighted average by contact
Average Work Time Forecast	Weighted average by contact
Service Level % Forecast	Weighted average by contact
Service Level Time Forecast	Weighted average by contact
Agents Scheduled	Weighted average by period duration
Contacts Actual	Total of column values
Agents Actual	Weighted average by period duration
Average Talk Time Actual	Weighted average by contact
Average Work Time Actual	Weighted average by contact

Column	Summary Calculation
Service Level % Actual	Weighted average by contact

Schedules

A schedule lists the times when agents are in service for a service queue. For each agent, a schedule includes the start and end times for work shifts, breaks, lunches, exceptions, overtime, and projects.

If you are using the multi-skill agent queuing (MSAQ) feature to generate a schedule for agents who support multiple service queues, the schedule will also include the times when the agents switch between service queues.

Schedules are based on the agents' work shifts. When WFM generates a schedule, it takes into account the agents' work shifts and the forecast associated with the agents' service queue. WFM looks at the requirements, the agents' availabilities, and preferences to create the most optimal schedules for the contact center and its agents.

WFM also uses absenteeism metrics when creating schedules. Absenteeism is based on actual hours absent rather than shrinkage, which is an arbitrary figure applied against a full 24-hour period and which increases the number of actual FTEs scheduled.

When creating a schedule for a service queue, WFM sorts all agents for the specified service queue by skill mapping and then sorts them by service queue priority (if used). Then WFM sorts the agents based on scheduling order parameters.

Agents assigned to fixed work shifts are scheduled before agents assigned to variable work shifts. After sorting agents, WFM schedules the first agent based on the agent's work shift preferences and optimizes the agents' breaks, lunches, and projects based on the minimum and maximum delays entered. The work shifts, breaks, lunches, and projects are influenced by coverage requirements. After scheduling the first agent, WFM schedules the next agent, and so on.

Closed Days and Fixed Work Shifts

When WFM schedules an agent with a fixed work shift, it schedules the agent for days, hours, and arrival times exactly as specified in the work shift configuration. It does not take into account a closed day for a service queue. As a result, an agent with a fixed work shift can be

scheduled to work on a day when the contact center is closed (for example, a mid-week holiday).

To prevent this situation, create an exception and assign it to agents with fixed work shifts who would ordinarily be working on the closed day.

Scheduling O rder

WFM allows contact centers to define the scheduling order for each service queue (in the Scheduling Order section on the Service Queues page) by these criteria:

- Maximum hours available
- Minimum hours available
- Maximum hours per week
- Minimum hours per week
- Company start date
- Department start date
- Rank

This allows you to manage customer contact operations while maximizing the available agents for the most important activities.

Depending on your contact center's policies, you can schedule agents based on availability for a work shift, their seniority, or their ranking in the contact center.

Interpolating Agent Requirements in Forecasts

You can configure a schedule to interpolate the agent requirements in 15-minute intervals even though the standard schedule interval is 30 minutes.

When interpolation is enabled, WFM assigns the agents where they are most needed in a 30-minute interval. For example, WFM might assign two agents to the first 15 minutes of the interval and three agents to the second 15 minutes based on the contact center’s requirements.

If interpolation is not enabled, WFM assigns agents to the 30-minute interval without regard to possible differing requirements for the two 15-minute segments of the interval.

Service Queue Priority

Assigning a priority number to a service queue allows WFM to resolve scheduling conflicts when agents are assigned to multiple service queues. Zero (0) is the highest priority.

To generate a schedule for a service queue, WFM finds the agents who are assigned to a skill mapping that is associated with the desired service queue. WFM then determines which agents have a work shift with available hours on the specified day. If the agent supports multiple service queues, WFM uses service queue priority to determine which service queue will be assigned to the agent for this schedule.

> **Example**: You designate some of your agents to support two service queues and assign a priority to each service queue. If WFM generates the schedules for the two service queues and discovers there are not enough agents to support all forecast requirements across both service queues, it compares the priority value for the two service queues and schedules agents for the service queue with the highest priority first.

Generating a Schedule

To generate a schedule, follow these steps:

1. Access the Schedule Request page (Schedules and Planning > Schedule).
2. Select the one or more service queues to be scheduled.
3. Enter the start date and the number of weeks for the period you want to schedule. The start date used is the configured first day of the week of the week that contains the date you enter.
4. Select the Shrinkage check box if you want to apply shrinkage to the schedule to compensate for time lost due to vacation, breaks, holidays, illnesses, and so on. Shrinkage percentages are configured on the Shrinkage page.
5. Select the Work Shift Rotation check box if you want WFM to automatically rotate work shifts according to the work shift rotations configured for each agent scheduled. If the check box is not selected, you must configure a work shift for the specific week on the agent's Agents page.
6. Select the Interpolate Forecasts check box to schedule agents by 15-minute intervals instead of by 30-minute intervals.

7. Schedule when you want the request to run. By default the request is run immediately.
8. Click Run.

Messaging

The Messaging application allows you to manage schedule requests.

Agents can request time off, exceptions, and schedule offers and trades with the other agents on the team in their view. They can also accept or reject schedule trades and offers, and edit their own requests.

Supervisors and schedulers use Messaging to approve or deny agent requests.

Messaging for Agents

The Messaging application for agents consists of a menu for creating new requests and three mail boxes:

- The inbox, which contains all requests you receive
- The Outbox, which contains all requests you make
- The Public Box, which contains public schedule trades

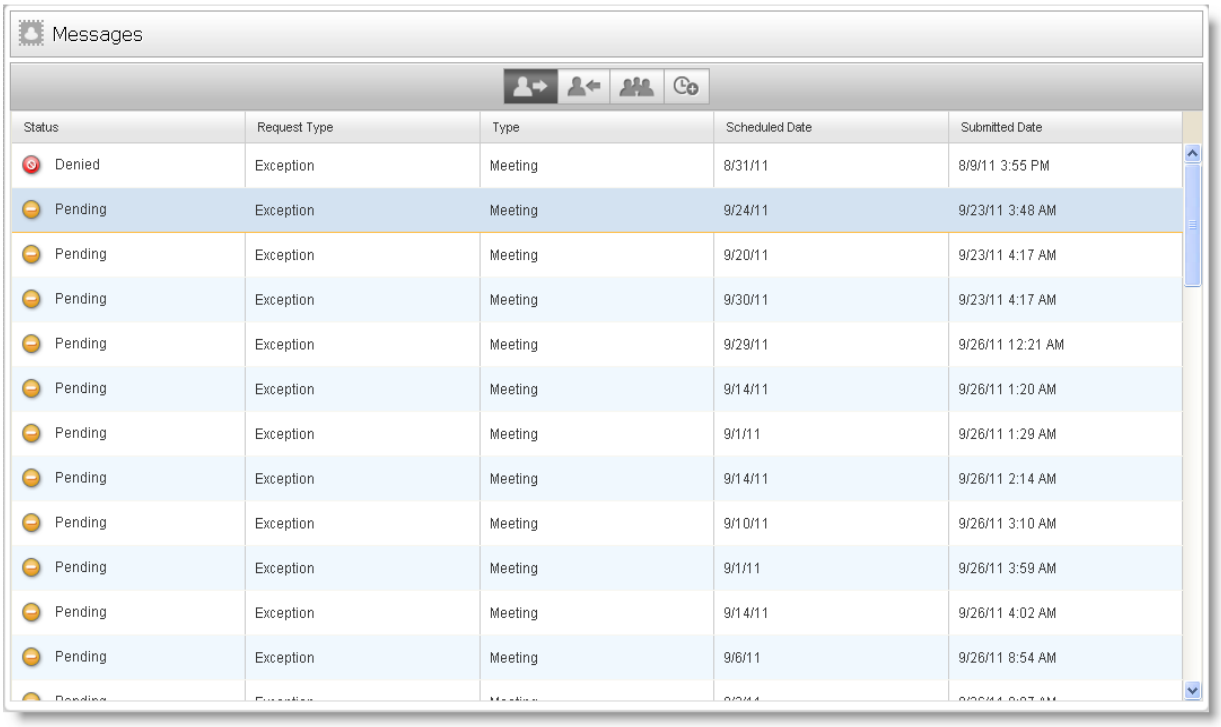
The default view is the Outbox. Requests can be retained from 6 to 99 months, with the default retention period set to 13 months. You cannot delete requests from any mail boxes yourself. They are deleted by the system when they pass the configured retention period.

Request statuses change as the request makes its way through the system. It is important to periodically refresh the mail box so you see the latest statuses. Use standard browser page refreshing methods, such as pressing F5 or clicking the Refresh button on the browser toolbar. Note that the Outbox is displayed after the refresh, even if you were viewing the Inbox or Public Box.

Access your mail boxes by clicking the mail box's icon in the Messaging toolbar. From left to right, the icons are Outbox, Inbox, Public Box, and New Requests.

Outbox

The Outbox contains all requests you have made in ascending scheduled date order. You can view the details of a request, and edit or delete the request if it has not yet been approved or denied.



Status	Request Type	Type	Scheduled Date	Submitted Date
Denied	Exception	Meeting	8/31/11	8/9/11 3:55 PM
Pending	Exception	Meeting	9/24/11	9/23/11 3:48 AM
Pending	Exception	Meeting	9/20/11	9/23/11 4:17 AM
Pending	Exception	Meeting	9/30/11	9/23/11 4:17 AM
Pending	Exception	Meeting	9/29/11	9/26/11 12:21 AM
Pending	Exception	Meeting	9/14/11	9/26/11 1:20 AM
Pending	Exception	Meeting	9/1/11	9/26/11 1:29 AM
Pending	Exception	Meeting	9/14/11	9/26/11 2:14 AM
Pending	Exception	Meeting	9/10/11	9/26/11 3:10 AM
Pending	Exception	Meeting	9/1/11	9/26/11 3:59 AM
Pending	Exception	Meeting	9/14/11	9/26/11 4:02 AM
Pending	Exception	Meeting	9/6/11	9/26/11 8:54 AM

The following table describes the fields in the Outbox.

Field	Description
Status	The status of the request. Possible statuses are: • Approved. Your request was approved by your supervisor. • Pending. Your schedule trade or schedule offer request is waiting for a response from another agent. Can be edited or deleted. • Waiting. A schedule offer or schedule trade request is waiting for your response. Can be accepted or rejected. • Submitted. Your request is waiting for a response from your supervisor. Can be edited or deleted. • Denied. Your request was denied by your supervisor. • Error. Your request contains an error. • Refused. Another agent has refused your schedule trade request. • Rejected. You rejected another agent's schedule trade request.
Request Type	The general type of request: Exception, Offer, or Trade.
Type	The specific type of request.
Scheduled Date	The date that the exception, schedule trade, or schedule offer occurs. By default, the Outbox is sorted by this date in ascending order. You can click the column header to toggle between ascending and descending order.
Submitted Date	The date and time when the request was submitted. Note that public trade offers do not display a submitted date until someone accepts them.

Working With Your Outbox

To view the details of a request:

- Double-click the request.

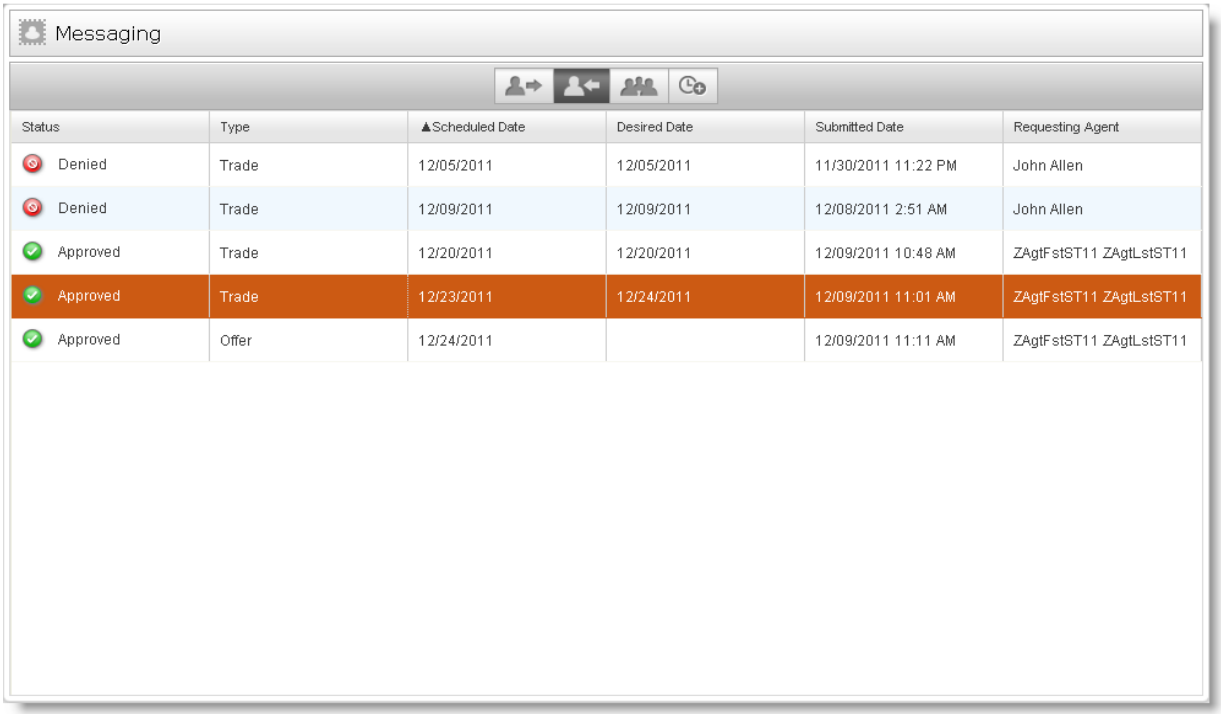
To edit a request that has not yet been approved or accepted:

1. Double-click the request to view the details.
2. Edit as desired.
3. Click Submit.

Inbox

The Inbox contains all requests you have received in scheduled date order. You can view the details of a request, and edit or delete the request if it has not yet been approved or denied.

Note: Supervisors have final authority over any schedule trades, so a trade you accept might be rejected by your supervisor.



Status	Type	▲Scheduled Date	Desired Date	Submitted Date	Requesting Agent
Denied	Trade	12/05/2011	12/05/2011	11/30/2011 11:22 PM	John Allen
Denied	Trade	12/09/2011	12/09/2011	12/08/2011 2:51 AM	John Allen
Approved	Trade	12/20/2011	12/20/2011	12/09/2011 10:48 AM	ZAgtFstST11 ZAgtLstST11
Approved	Trade	12/23/2011	12/24/2011	12/09/2011 11:01 AM	ZAgtFstST11 ZAgtLstST11
Approved	Offer	12/24/2011		12/09/2011 11:11 AM	ZAgtFstST11 ZAgtLstST11

The following table describes the fields in the Inbox.

Field	Description
Status	The status of the request. Possible statuses are: • Approved. Your request was approved and your schedule updated accordingly. • Pending. An accepted request is waiting for a response from another agent. Can be edited or deleted. • Submitted. The request is waiting for a response from your supervisor. Can be edited or deleted. • To-Do. The request is waiting for a response from you. Can be accepted or rejected. • Denied. Your request was denied by your supervisor. • Error. There is an error in the request. • Refused. You refused another agent's schedule trade request • Rejected. Another agent rejected your schedule trade request
Request Type	The general type of request: Exception, Offer, or Trade.
Scheduled Date	The date that the exception, schedule trade, or schedule offer occurs. By default, the Outbox is sorted by this date in ascending order. You can click the column header to toggle between ascending and descending order.
Desired Date	The date the requesting agent wants to receive (the Scheduled Date in a schedule offer request and schedule trade request).
Submit Date	The date and time when the request was submitted. Note that public trade offers do not display a submitted date until someone accepts them.
Requesting Agent	The name of the agent requesting a schedule trade or offer.

Working With Your Inbox

To accept or reject a schedule trade request:

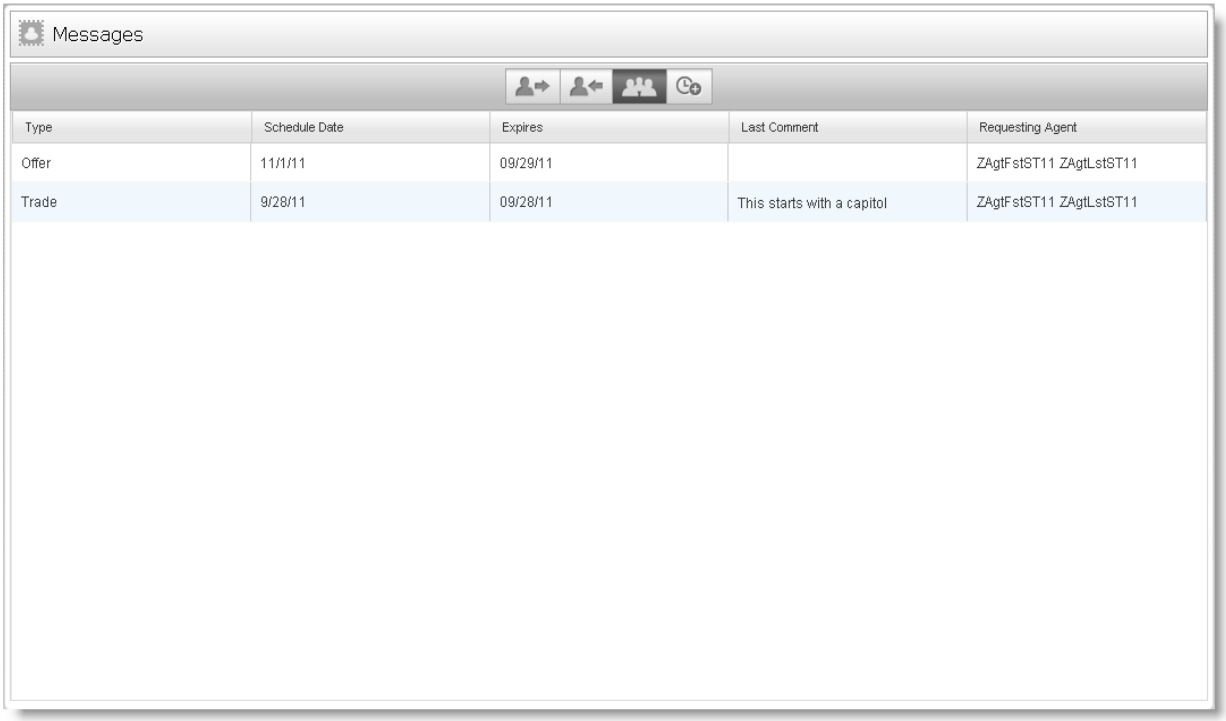
1. Double-click the request to open it.
2. Click Analyze to compare your schedule to the requesting agent's schedule on the two days. This tells you if you are available to accept the trade.
3. Click Accept or Reject.

To confirm or reject a schedule offer request:

1. Double-click the request to open it.
2. Click Analyze to compare your schedule for the specified day with the offered schedule.
3. Click Confirm to accept the offer request, or Reject to deny the offer request.

Public Box

The Public box contains all available public schedule offers and trades from the agents in your view. A public offer and trade are those that are available for any agent to accept. You can view the details of a request, evaluate the request, and then accept it if desired.



Note: Supervisors have final authority over any schedule trades and offers, so a trade or offer you accept might be rejected by your supervisor.

The following table describes the fields in the Public Box.

Public fields

Field	Description
Request Type	The general type of request: Offer or Trade.
Schedule Date	The date that the requester wants to give up. By default, the Public Box is sorted by this date in ascending order.
Expire Date	The date the request expires. The request expires at 23:59 of this date, after which you can no longer accept or cancel the request.
Last Comment	The last comment entered on the request.
Requesting Agent	The name of the agent requesting a schedule trade or offer.

Working With the Public Box

To accept a schedule trade request:

1. Double-click the request to open it.
2. Select a date you want to trade for the date in the request.
3. Click Analyze to compare the two schedules and ensure that your proposed date works.
4. Enter comments about your proposed date in the Comments field, if desired.
5. Click Accept.

To accept a schedule offer request:

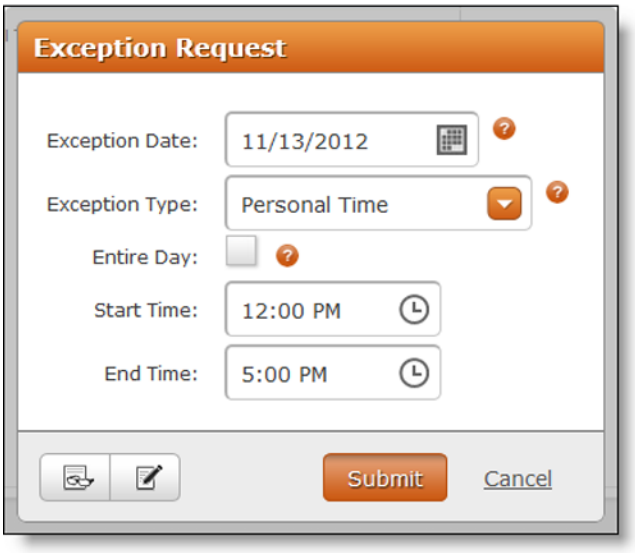
1. Double-click the request to open it.
2. Click Analyze to compare your schedule for the specified day with the offered schedule.
3. Click Accept if you want to accept the offer, or Cancel to close the request without accepting it.

Requests

The New Request menu enables you to create a request for exceptions, schedule offers, and schedule trades.

Requesting an Exception

Use an exception request to request a change in your schedule for unplanned activities such as meetings, training sessions, unscheduled breaks, and absenteeism. Your request is sent to your supervisor for approval.



Exceptions can be requested for both future and past dates. Exceptions for past dates are used to correct your adherence percentage. For example, if you had to go home sick yesterday, your statistics would show you out of adherence because you did not follow your schedule. Requesting an exception for personal time off for the time you were out of the office corrects the schedule and your adherence percentage for that day.

The following table describes the fields in the Exception Request dialog box.

Exception Request fields

Field	Description
Exception Date	The date you want the exception to occur. The current date is shown by default.

Field	Description
Exception Type	Drop-down list of the available exception types.
Entire Day	Select the check box to indicate that the exception is for the entire day. When selected the Start Time and End Time fields are hidden.
Start Time	The time the exception starts.
End Time	The time the exception ends.
Write Comment	Click to enter an optional comment (maximum of 140 characters) regarding the exception request.

An exception request flows through the system as outlined in the following table.

Exception request flow

User	Action	Shows Up Here	Status
Agent A	Creates new request	Supervisor To Do Box	To-Do
Supervisor	Receives request	Supervisor To Do Box	Approved/Denied
Supervisor	Approves/denies exception	Agent A Inbox	Approved/Denied
		Supervisor All box	Approved/Denied

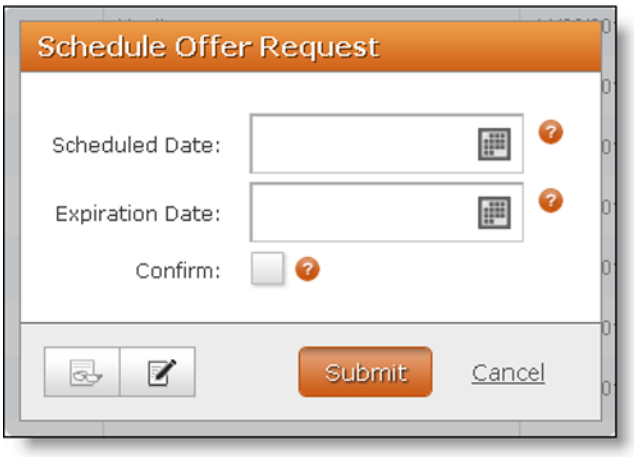
Creating a New Exception Request

To create a new exception request:

1. Click New Request and choose Exception Request from the menu.
2. Complete the fields.
3. Click Submit.

Requesting a Schedule O ffer

Use a schedule offer request to make a day you are scheduled to work available for another agent to work. For example, if you have an obligation away from work on Wednesday, you offer your shift to anyone else who can work that day. The schedule offer is posted to the Public Box of all agents in your view.



The following table describes the fields in the Schedule Offer Request dialog box.

Field	Description
Scheduled Date	The date you want to offer to other agents to work. By default it displays tomorrow's date. You cannot choose a date in the past.
Expiration Date	The date your request expires. At that time it no longer appears in your Outbox or in the Public Box. The expiration date must be before the Scheduled Date.
Confirm	Select this check box if you want to confirm an agent's acceptance of the offer before it is sent to your supervisor for approval.

A schedule offer request without confirmation flows through the system as outlined in the following table.

Schedule offer request without confirmation flow

User	Action	Shows Up Here	Status
Agent A	Creates new request	Agent A Outbox	Pending
All agents	Receive offer	Agents' Public Box	None
Agent B	Accepts offer	Agent B Inbox	Submitted
		Agent A Outbox	Submitted
Supervisor	Receives accepted offer	Supervisor To-Do Box	To-Do
Supervisor	Approves/denies offer	Supervisor All Box	Approved/Denied
		Agent A Outbox	Approved/Denied
		Agent B Inbox	Approved/Denied

A schedule offer request with confirmation flows through the system as outlined in the following table.

Schedule offer request with confirmation flow

User	Action	Shows Up Here	Status
Agent A	Creates new request	Agent A Outbox	Pending
All agents	Receive offer	Agents' Public Box	None
Agent B	Accepts offer	Agent B Inbox	Pending
Agent A	Receives accepted offer	Agent A Outbox	To-Do
		Agent B Inbox	Pending

User	Action	Shows Up Here	Status
Agent A	Confirms/rejects offer	Agent A Outbox	Submitted/Denied (Rejecting the request creates a copy of the request that shows Denied on it and the original request goes back to Pending)
		Agent B Inbox	Submitted/Denied
Supervisor	Receives accepted offer	Supervisor To-Do Box	To-Do
		Supervisor All Box	Approved/Denied
		Agent A Outbox	Approved/Denied
		Agent B Inbox	Approved/Denied

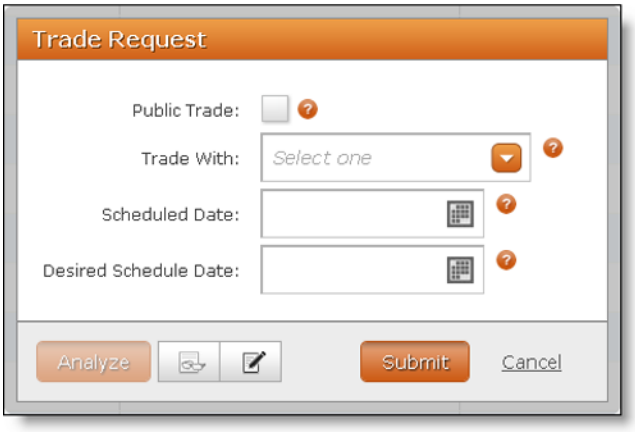
Creating a New Schedule Offer Request

To create a new schedule offer request:

1. Click New Request and choose Schedule Offer Request from the menu.
2. Complete the fields.
3. Click Submit.

Requesting a Schedule Trade

Use the schedule trade request to trade a scheduled work day with someone else's scheduled work day. These trade requests can be with a specified agent (a private trade) or with any agent in your view (a public trade). You can ask to trade shifts on the same day (for example, you might want to trade your 7 am-3 pm shift with someone else's 10 am-6 pm shift) or for different days (for example, you might want to trade your Monday off for a Friday off).



The following table describes the fields in the Trade Request dialog box.

Field	Description
Public Trade	Select this check box to post your schedule trade in the Public Box of all agents in your view.
Confirm	(Public trades only) A reminder that you will be asked to confirm or reject a proposed trade from the replying agent. This check box is read-only and cannot be cleared.
Trade With	(Private trades only) Select the name of the agent with whom you want to trade schedules.
Scheduled Date	The date you want to trade. By default it displays tomorrow's date.
Desired Schedule Date	(Private trades only) The date you want to trade for. By default it displays tomorrow's date.
Expiration Date	(Public trades only) The date the request expires.

A private schedule trade request flows through the system as outlined in the following table.

Private schedule trade request flow

User	Action	Shows Up Here	Status
Agent A	Creates new request	Agent A Outbox	Pending
Agent B	Receives trade request	Agent B Inbox	To-Do
Agent B	Accepts/refuses trade request	Agent B Outbox	Submitted/Denied
Agent A	Receives Agent B's answer	Agent A Inbox	Submitted/Denied
Supervisor	Receives accepted trade request for approval	Supervisor To Do Box	To-Do
Supervisor	Approves/denies trade	Agent A Outbox	Approved/Denied
		Agent B Inbox	Approved/Denied
		Supervisor All Box	Approved/Denied

A public schedule trade request flows through the system as outlined in the following table.

Public schedule trade request flow

User	Action	Shows Up Here	Status
Agent A	Creates new request	Agent A Outbox	Pending
All Agents	Sees trade in Public Box	Agents' Public Box	None
Agent B	Accepts trade request	Agent B Inbox	Pending
Agent A	Receives Agent B's answer	Agent A Outbox	To-Do

User	Action	Shows Up Here	Status
Agent A	Confirms/rejects Agent B's acceptance	Agent A Outbox	Submitted/denied (Rejecting the request creates a copy of the request that shows Denied on it and the original request goes back to Pending)
	Agent B receives Agent A's confirmation/rejection	Agent B Inbox	Submitted/denied
Supervisor	Receives accepted and confirmed trade request for approval	Supervisor To-Do Box	To-Do
Supervisor	Approves/denies trade	Agent A Outbox	Approved/Denied
		Agent B Inbox	Approved/Denied
		Supervisor All Box	Approved/Denied

Creating a New Schedule Trade Request

To create a new schedule trade request:

1. Click New Request and choose Schedule Trade Request from the menu.
2. Complete the fields.
3. If this is a private trade, click Analyze to compare your schedule on the proposed trade date with that of the person with whom you want to trade to make sure that the trade is possible.
4. If desired, click Write Comment and enter a comment.
5. Click Submit.

Editing or Deleting a Request

Requests can be edited or deleted in certain situations. The following table describes when you can edit or delete a request.

Request Type	Status	Action Allowed
Schedule Offer (public)	Pending	Edit, Delete
Schedule Trade (private)	Pending	Edit
Schedule Trade (public)	Pending	Edit, Delete
Exception	Submitted	Edit, Delete

Editing a Request

1. Double-click the request to open it.
2. Edit the request as desired.
3. Click Submit.

Deleting a Request

1. Double-click the request to open it.
2. Click Delete.

Messaging for Supervisors, Schedulers, and Administrators

The Messaging application for supervisors, schedulers, and administrators consists of two mail boxes:

- The To-Do Box, which displays all requests that require action from you (the default view)
- The All Box, which contains all requests sent to you

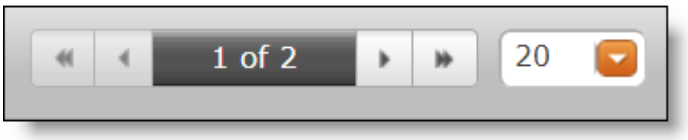
Requests can be retained from 6 to 99 months in the All Box, with the default retention period set to 13 months.

Access your mail boxes by clicking the mail box's icon in the Messaging toolbar. From left to right, the icons are the To-Do Box and the All Box.

Note: Supervisors who are also agents have a dual mailbox, one with the agent's view and one with the supervisor's view. You can switch between the two views using the My Requests and All Requests buttons. Click My Requests to see the agent mailbox, and All Requests to see the supervisor mailbox.

Navigating in your Mailboxes

To the right of the mailbox toolbar are the page view controls. These controls help you navigate through the multiple pages of your mailboxes.



Use the single arrows to move backward and forward one page at a time and the double arrows to move to the beginning or end page in the mailbox. Control the number of requests displayed in one page using the drop-down list at the right. You can select one of the standard numbers (20, 40, 60, or 80) or enter your own number from 1 to 999.

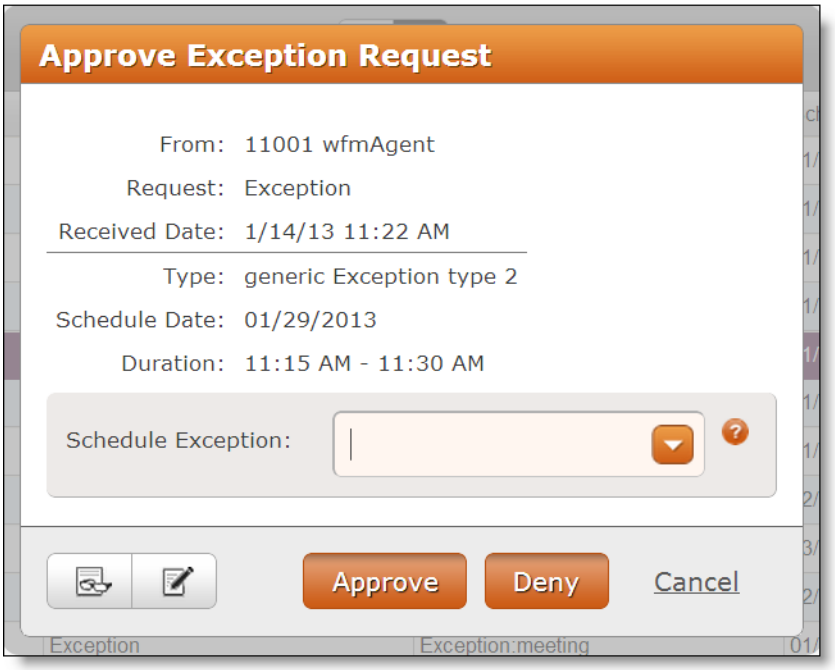
Jump to a specific page by clicking the dark gray center of the controls. This brings up a field you can type a page number in, for example "5" to jump to page 5 of 10.

Approving or Denying Requests

Requests that require your approval appear in your To-Do Box. Once you have approved or denied a request, it is removed from your To-Do Box. All requests that you have received are archived in your All Box.

Exception Requests

The Approve Exception Request dialog box enables you to approve or deny an agent's exception request.



The following table describes the fields in the Approve Exception Request dialog box.

Field	Description
From	The name of the agent requesting the exception.
Request	The type of request.
Received Date	The time and date you received the request. This is the same time and date the agent submitted the request.
Type	The type of exception, as chosen by the agent.
Scheduled Date	The date of the exception.
Duration	The duration of the exception.

Field	Description
Schedule Exception	Select the exception type description that will appear in the schedule if the exception is approved.

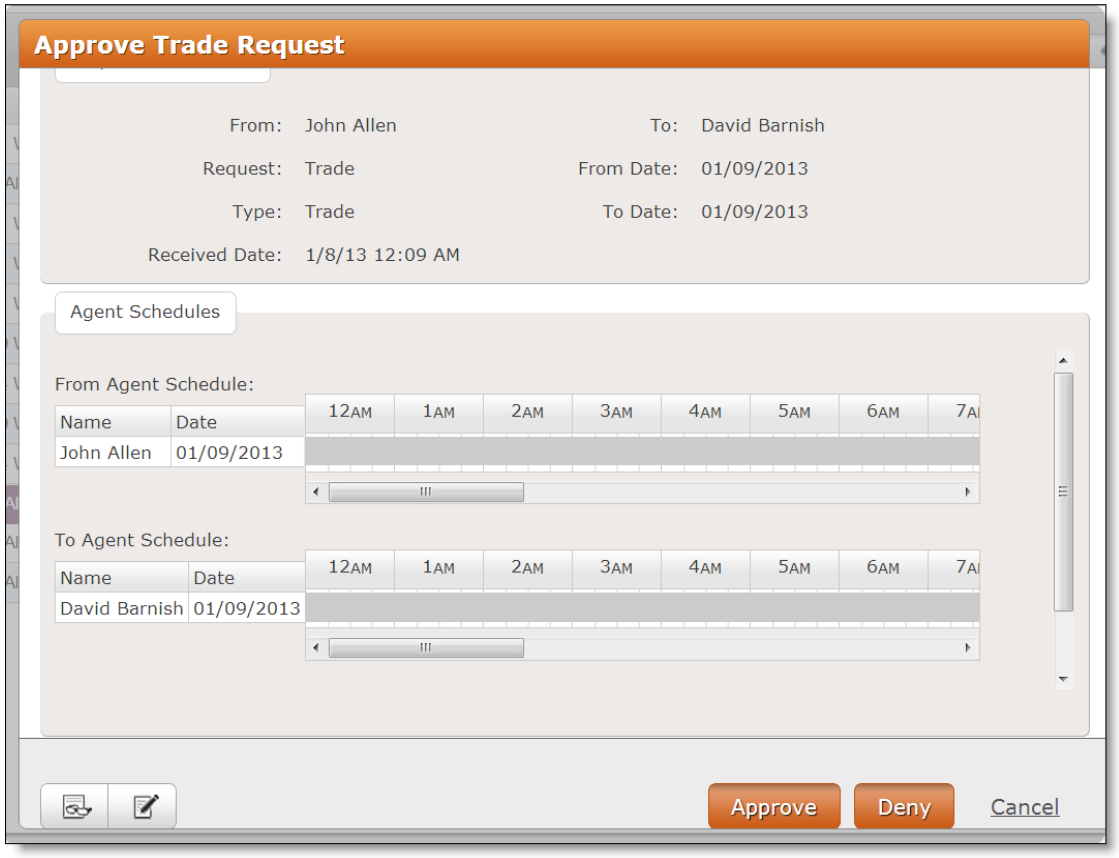
Approving or Denying an Exception Request

To approve or deny an exception request:

1. In the To-Do Box, double-click the request to open it.
2. If approving the request, select the appropriate schedule exception from the drop-down list. This is what appears in the schedule. Click Read Comments if any comments are attached to the exception request.
3. Click Approve or Deny.

Approve Trade or O ffer Request

The Approve Trade Request dialog box allows you to analyze, and then approve or deny a trade request or an offer request.



The following table describes the fields in the Approve Trade Request dialog box.

Field	Description
From	The name of the agent who requested the trade.
Request	The Trade high-level request type.
Type	The type of trade request.
Received Date	The date and time the request was submitted.
To	The name of the other agent involved in the trade.
From Date	The first scheduled date involved in the trade.
To Date	The second scheduled date involved in the trade. This field only appears when different days are involved in the trade request.

Field	Description
From Agent Schedule	The schedule for the agent requesting the trade. Use the scroll bar to view the agent's entire schedule.
Name	The name of the agent.
Date	The date specified in the trade request.
To Agent Schedule	The schedule for the agent accepting the trade.

Approving or Denying a Schedule Trade or Offer Request

To approve or deny a schedule trade or offer request:

1. In the To-Do Box, double-click the request to open it.
2. Use the Agent Schedules section to analyze the two schedules to make sure they can be traded. Click Read Comment if any comments are attached to the trade or offer request.
3. Click Approve or Deny.

Reporting

The Reporting application is a common (multi-product) application that contains reports for all the products you are logged into. The reports that you can access are determined by your role.

Reporting Roles and Scope

Your role determines which reports you can access. If you are assigned multiple roles (for example you are both a supervisor and an agent), you will have access to the reports available to each of those roles.

Role	Scope
Agent	Reports that pertain only to the agent
Supervisor	Reports for the agents, teams, projects, work conditions, work shifts, and exceptions within the supervisor's view
Scheduler	Reports for the service queues, skill mappings, teams, projects, work conditions, work shifts, and exceptions within the scheduler's views
Administrator	All reports

Running a Report

Follow these steps to run a report:

1. In the Reporting application toolbar, click one of these buttons:
    - The button for the product whose reports you want to run. If you use a shared login, there will be a button for each product.
    - The Saved button to access reports that have already been set up and saved for reuse.

2. From the resulting page, click the report you want to run to display that report's setup page.
3. Complete the report setup information. Choose the criteria, the date range, the format, and the fields to be included in the report.
4. If your role enables you to, set the recurrence of the report. You can set up the report to run automatically at specified intervals for a specified length of time or indefinitely. Recurring reports are emailed to the email addresses you enter in the Destination section. At least one email address is required.
5. Click Run Report to run the report immediately, or Save As to save the report for future use.

Points to Remember

When running reports, remember the following points:

- When you save a report, the settings are saved for that report. For example, you can save a report for one service queue, and then modify the report and save it for another service queue.
- Some reports allow you to choose the fields that appear in the report and the order in which those fields appear. When you click Run Report or Save As, the selected fields become the default fields for the report.
- If enabled, supervisors, schedulers, and administrators can schedule a report to run on a recurring basis and specify when to run the report. The report is sent by email to specified email addresses.
- The email for a scheduled report includes the email address of the user who scheduled the report in the From field. If the user's email address is not available, the email address will be <First name>.<Last name>@ automated.report. Where <First name> and <Last name> is the name of the user.

Customizing the Report Logo

Starting with Service Release 3, reports output in HTML, PDF, and XLS format contain a logo in the upper left corner next to the report title. By default, the logo is the Cisco logo.

You can customize the logo by replacing the default logo with one of your own. This is done in the WFM Configuration Setup (Postinstall.exe) utility.

For information on how to customize the report logo, see “Configuring WFM” in the *WFM Installation Guide*.

Recalculating Data for Agent and Team Performance Reports

It might become necessary to correct a schedule for a past day and recompute adherence and conformity calculations so that agent and team productivity statistics are correct.

The WFM Adherence Conformity Calculator (ACC) service processes data from the daily schedule and agent status table and computes the adherence and conformity percentages for historical productivity reports every day.

If you make changes in a past schedule and need to recompute this data, perform the following steps.

1. On the server that hosts the Transaction services, open the ..\WFO_WFM\Schedule\confcom_odysoft_calabrio_scheduler.properties file in a text editor.
2. Locate the lastHistoricalDay property section.
3. Change the value (the default value is -5, meaning 5 days in the past) to a value that includes the date whose schedule you changed. Note that the higher the value you enter, the longer it will take for the data to be recalculated. The recommended maximum value is -14.
4. Save your changes.
5. Restart the ACC service so that the property value takes effect.

WFM Reports

The reports available in WFM are the following.

> **Note**: Reports are not available for non-interactive service queues.

Agent and Team Performance Reports

- Agent and Team Productivity Report

Service Queue Performance Reports

- Agent and Team Productivity Report
- Agent and Team Productivity Report

- Interval Service Queue Report
- Service Queue Agent Interval Report
- Team Agent Interval Report
- Team Interval Report

Schedule View Reports

- Assigned Exception Report
- Agent O vertime Report
- Agent Schedule Daily Report
- Agent Schedule Weekly Report
- Agent Task Percentages Report
- Service Queue Schedule By Agent Report
- Service Queue Schedule By Interval Report
- Team Schedule Task Hours Report

Performance Analysis Reports

- Agent Report Card
- Performance Daily Report
- Performance Interval Report

Agent and Team Productivity Report

This is an Agent and Team Performance report.

The Agent and Team Productivity report displays the agent's or team's productivity statistics over a selected date range, by day, week, or month. Statistics are reported only for time periods during which the agent is logged in.

To display the report, you must select:

- Team and/or Agent
- Date(s)
- Group Dates By (Day, Week, or Month)

Note: If you just select one or more teams, then a Team Productivity Report is produced. If you select one or more teams and one or more agents, then an Agent Productivity Report is produced.

Note: The values for Adherence % and Conformity% in this report are based on data calculated before adherence/conformance calculation enhancements were made. As a result, the values are simple averages and not weighted averages.

You can also select which fields to display, except for Agent or Team, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

ACD ID

Adherence %

Average Handle Time

Average Hold Time

Average N ot Ready Time

Average Ready Time

Average Talk Time

Average Work Time

Calls Handled

Calls Inbound

Calls Per Hour

Calls Transferred

Conformance %

Date

O ccupancy %

Total Handle Time

Total Hold Time

Total In Service Time

Total Login Time

Total Not Ready Time

Total Ready Time

Total Talk Time

Total Work Time

Utilization %

Agent Interval Report

This is a Service Queue Performance report.

The Agent Interval report displays the selected agents' activity over half-hour intervals on a selected date.

To display the report, you must select:

- Scope (team or skill mapping)
- Team or service queue
- Agents
- Date(s)

You can also select which fields to display, except for Agent and Interval, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Average Handle Time

Average Talk Time

Average Work Time

Busy Other State Time

Calls Answered

Calls Handled

Date

In Service Time

Occupancy %

Ready State Time

Utilization %

Agent O vertime Report

This is a Schedule View report.

The Agent Overtime report displays the number of overtime hours worked by selected agents in selected teams or service queues over a selected date range.

To display the report, you must select:

- Scope (team or skill mapping)
- Team or service queue
- Agent
- Date(s)

You can also select which fields to display, except for Agent Name and Date, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Duration

End Time

Start Time

Username

Agent Report Card

This is a Performance Analysis report.

The Agent Report Card report displays performance information for a selected date range; agents, teams, or teams and agents; and team or service queue mapping.

You must select the following to display the report:

- Scope (agent, team, or team agent)
- Filter by (team or skill mapping)
- Teams

- Agents
- Evaluation form
- Goal metrics
- Date(s)

If Call Recording and Quality Management is installed and if WFM is configured to import evaluation form information, the Evaluation Form drop-down list displays a list of the evaluation forms used in Call Recording and Quality Management to evaluate agent performance. If an evaluation form is selected, the data in the Agent Report Card will reflect only data from agent evaluations using the selected evaluation form and meeting all other report selection criteria.

The goal metrics section displays the default field values set for the following statistics.

Statistic	Default Value
Average Quality Score	75
Average Calls Per Hour	10
Adherence %	75
Conformity %	0
Occupancy %	0
Utilization %	0
Avg. Handle Time	0
Avg. Talk Time	0
Avg. Work Time	0
Avg. Hold Time	0
Avg. Ready Time	0

You can modify these goals as desired. When the Agent Report Card is generated, the agent's or team's performance against these goals is indicated. The values displayed are weighted averages.

You can also select which fields to display, except for Agent and Team, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Adherence %

Average Calls Per Hour

Average Handle Time

Average Hold Time

Average Quality Score

Average Ready Time

Average Talk Time

Average Work Time

Conformity %

O ccupancy %

Utilization %

Note: The values for Adherence % and Conformity % in this report for dates before WFM 9.2 was installed are based on data calculated before adherence/conformance calculation enhancements were made. As a result, these values are simple averages and not weighted averages.

Agent Schedule Daily Report

This is a Schedule View report.

The Agent Schedule Daily report details selected agents' scheduled activities by day for a selected date range.

To display the report, you must select:

- Scope (team or skill mapping)
- Team or service queue
- Agent
- Date(s)

You can also select which fields to display, except for Agent Name and Date, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Activity Duration

Activity End Time

Activity Start Time

Activity Type

Service Queue

Agent Schedule Weekly Report

This is a Schedule View report.

The Agent Schedule Weekly report details selected agents' scheduled activities by week starting on a selected date.

To display the report, you must select:

- Scope (team or skill mapping)
- Team or service queue
- Agent
- Date(s)

You can also select which fields to display, except for Agent Name, Agent Number, Arr (arrival time), and Dep (departure time), which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

In Service Hours

Paid Hours Assignment

Paid Hours Break

Paid Hours Closed Service

Paid Hours Exception

Paid Hours L unch

Paid Hours Project

Paid Hours Total

Agent Service Queue Interval Report

This is a Service Queue Performance report.

The Agent Service Queue Interval report displays agent activity for selected agents in selected service queues over half-hour intervals on a selected date.

To view the report, you must select:

- Scope (team or skill mapping)
- Team or service queue
- Agents
- Date(s)

You can also select which fields to display, except for Agent, Interval, and Service Queue, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Average Handle Time

Average Talk Time

Average Work Time

Calls Answered

Calls Handled

Date

Agent Task Percentages Report

This is a Schedule View report.

The Agent Task Percentage report displays selected agents' activities in terms of percentages of total work time for selected agents over a selected date range, by day, week, or month.

To display the report, you must select:

- Scope (team or skill mapping)
- Team or skill mapping
- Agent

- Date(s)
- Group date by (day, week, month)

You can also select which fields to display, except for Agent Name and Date, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Percent Assignment

Percent Break

Percent Closed

Percent Exception

Percent In Service

Percent L unch

Percent O vertime

Percent Project

Username

Assigned Exception Report

This is a Schedule View report.

The Assigned Exception report displays all occurrences of a selected exception type assigned to selected agents over a selected date range. Exception types are created and maintained in the Activities section under the Application Management application.

> **Note**: It is possible to have all-day exceptions on dates for which schedules have not yet been run. If that is the case, then the Start, End, and Duration fields for those exceptions will be empty. Once a schedule has been run for those dates, the report will display values in those fields.

To display the report, you must select:

- Scope (team or skill mapping)
- Team or service queue
- Agent

- Exception
- Date(s)

You can also select which fields to display, except for Last Name and First Name, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Agent ID

Date

Duration

End

Entire Day

Exception

Start

Interval Service Queue Report

This is a Service Queue Performance report.

The Interval Service Queue Report displays comprehensive statistics for selected service queues over half-hour intervals on a selected date.

To display the report, you must select:

- Service queue group
- Service queue
- Date(s)

You can also select which fields to display. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Agents Actual

Agents Forecast

Agents Projected

Agents Scheduled

Agents Shrinkage

Average After Contact Work Actual

Average After Contact Work Forecast

Average Handle Time Actual

Average Handle Time Forecast

Average Speed of Answer Time Actual

Average Speed of Answer Time Forecast

Average Talk Time Actual

Average Talk Time Forecast

Calls Abandoned

Calls Answered

Calls Handled

Calls Reforecast

Calls Offered Actual

Calls Offered Forecast

Handled %

Interval

Occupancy % Actual

Occupancy % Forecast

Precision %

Seconds Service Level Scheduled

Service Level % Actual

Service Level % Forecast

Service Level % Goal

Service Level % Scheduled

Service Level % Shrinkage

Shrinkage %

Performance Daily Report

This is a Performance Analysis report.

The Performance Daily report displays statistics for selected service queues over a selected date range that describe the service queues' actual versus forecast performance and the forecast's accuracy.

To display the report, you must select:

- Service queue
- Date(s)

You can also select which fields to display, except for Service and Date, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Abandon %

Average Handle Time Actual

Average Handle Time Forecast

Average Speed of Answer

Calls Offered Actual

Calls Offered Forecast

Forecast Accuracy

Handle Time Accuracy

Service Level % Actual

Performance Interval Report

This is a Performance Analysis report.

The Performance Interval report displays statistics for selected service queues over a selected date range that describe the service queue's actual versus forecast performance and the forecast's accuracy for each half-hour interval.

To display the report, you must select:

- Start date
- End date
- Service queue

You can also select which fields to display, except for Service, Date, and Interval, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Abandon %

Agents Actual

Agents Actual – Agents Forecast

Agents Actual – Agents Scheduled

Agents Forecast

Agents Scheduled

Agents Scheduled – Agents Forecasted

Average Handle Time Actual

Average Handle Time Forecast

Average Speed of Answer

Calls Offered Actual

Calls Offered Forecast

Forecast Accuracy

Handle Time Accuracy

Service Level % Actual

Service Queue Agent Interval Report

This is a Service Queue Performance report.

The Service Queue Agent Interval report displays agent statistics for selected agents in selected service queues over half-hour intervals on a selected date.

You must select the following to display the report:

- Service queue
- Date(s)

You can also select which fields to display, except for Agent, Interval, and Service, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Average Handle Time

Average Talk Time

Average Work Time

Calls Answered

Calls Handled

Service Queue Schedule By Agent Report

This is a Schedule View report.

The Service Queue Schedule By Agent report displays agent schedules for a selected date, agent type, and service queue.

To display the report, you must select:

- Service queue
- Agent category
- Date(s)

The possible agent categories are:

- All Agents for Service
- Agents for Service with Available Time
- Agents Scheduled for Service

This report shows the hourly schedule for the selected day. Each agent's schedule is coded to show the activity scheduled for each hour. Coverage for each service queue is also shown.

Agent activity codes are as follows:

Code	Description
X	In service
B	Break
L	Lunch
A	Assignment

Code	Description
C	Closed service queue
P	Project
E	Exception
–	Not available
<blank>	Available but not scheduled

Service queue coverage codes are as follows:

Code	Description
–	Fewer agents scheduled in service than forecast requirements
*	Agents scheduled in service match forecast require-ments
+	More agents scheduled in service than forecast requirements

Service Queue Schedule By Interval Report

This is a Schedule View report.

The Service Queue Schedule by Interval report displays the schedule for selected service queues for a selected date by half-hour intervals.

To display the report, you must select:

- Service queue
- Date(s)

You can also select which fields to display, except for Service and Date, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Agents Forecast

Agents Scheduled

Agents Scheduled – Agents Forecasted

Assignment

Break

Closed

Exception

In Service

Interval

L unch

Project

Total

Team Agent Interval Report

This is a Service Queue Performance report.

The Team Agent Interval report displays statistics for each agent of a selected team on a selected date who has activity during the half-hour intervals.

To display the report, you must select:

- Team
- Date(s)

You can also select which fields to display, except for Agent and Interval, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Average Handle Time

Average Talk Time

Average Work Time

Busy O ther State Time

Calls Answered

Calls Handled

Date

In Service Time

O ccupancy %

Ready State Time

Team

Utilization %

Team Interval Report

This is a Service Queue Performance report.

The Team Interval report displays statistics on the activity for the selected teams on the selected date during each interval in which there was activity for that team.

To display the report, you must select:

- Teams
- Date(s)

You can also select which fields to display, except for Team and Interval, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Average Handle Time

Average Talk Time

Average Work Time

Busy O ther State Time

Calls Answered

Calls Handled

Date

In Service Time

O ccupancy %

Ready State Time

Utilization %

Team Schedule Task Hours Report

This is a Schedule View report.

The Team Scheduled Task Hours report displays a breakdown of the daily time allotted to various activities for the selected team over a selected date range.

To display the report, you must select:

- Teams
- Date(s)

You can also select which fields to display, except for Team and Date, which are required. By default, all fields are selected.

The following are the fields that you can select to appear in the report. You can customize the order in which the fields appear from left to right.

Assignment Paid

Assignment Unpaid

Break Paid

Break Unpaid

Closed Paid

Closed Unpaid

Exception Paid

Exception Unpaid

In Service

L unch Paid

L unch Unpaid

Project Paid

Project Unpaid

Total Paid

Total Unpaid

Report Field Dictionary

This section is an alphabetical listing and description of all fields that appear in WFM reports.

ABANDON %

The percentage of calls abandoned during the interval.

Abandoned % = (A ÷ B) × 100

Where:

A = Number of calls abandoned while the call was in queue or ringing at the agent's phone for the service queue during the interval, whether or not the call persisted less than the service level seconds.

B = Number of calls offered for the service queue during the interval.

ACD ID

The agent's identifier in the ACD.

ACTIVITY DURATION

The duration of a scheduled activity, in minutes.

ACTIVITY END TIME

An activity's scheduled ending time.

ACTIVITY START TIME

An activity's scheduled starting time.

ACTIVITY TYPE

The type of activity: assignment, break, closed service, exception, lunch, or project.

ADHERENCE %

The percentage describing how well agents stick to their planned work schedule.

Adherence % = [(A – B) ÷ C] × 100

For data collected before WFM 8.9 was installed, these variables are defined as follows:

A = total time during the interval the agent was scheduled to be in service and was actually in service.

B = Total time during the interval the agent was scheduled to not be in service and was actually not in service.

C = Total time during the period that agent was scheduled to be in service and not in service.

For data collected after WFM 8.9 was installed, these variables are defined as follows:

A = Total configured schedule adherence minutes

B = Total minutes not in adherence

C = Total configured schedule adherence minutes

AGENT ID

The agent's system ID number.

AGENT

The agent's name.

AGENT NUMBER

The agent's ID number.

AGENTS ACTUAL

The count of full time equivalent (FTE) agents supporting the service queue during the interval. Agent time is included only when the agent is in service.

Agents actual = A ÷ 1800

Where:

A = In service time in seconds for agents scheduled to support the service queue during the interval.

AGENTS ACTUAL – AGENTS FORECAST

The number of Agents Actual minus the number of Agents Forecast.

AGENTS ACTUAL – AGENTS SCHEDULED

The number of Agents Actual minus the number of Agents Scheduled.

AGENTS FORECAST

The number of forecasted agents required for the service queue during the interval.

Agents forecast = Sum(forecasted agents) ÷ Number of intervals with at least one forecasted agent

AGENTS PROJECTED

The projected number of agents required for the service queue during the interval. This is a trend calculation based on the current trend of actual and forecasted agents.

Agents projected = sum of agents projected ÷ number of intervals with at least one projected agent

AGENTS SCHEDULED

The number of agents scheduled for the service queue during the interval.

AGENTS SCHEDULED – AGENTS FORECASTED

The number of Agents Scheduled minus the number of Agents Forecast.

AGENTS SHRINKAGE

The number of agents expected after shrinkage is applied.

Agents Shrinkage = (Agents Scheduled) – (Agents Forecast)

ARR

The work shift arrival time.

ASSIGNMENT

The time scheduled for the agent and classified as assignment type work.

ASSIGNMENT PAID

The amount of paid time classified as assignment type work.

ASSIGNMENT UNPAID

The amount of unpaid time classified as assignment type work.

ATTRITION RATE

The rate of loss of employees to promotion, transfer, or termination.

AVERAGE CALLS PER HOUR

The calculation of the average number of calls per hour.

Average calls per hour = 3600 ÷ (A + B)

Where:

A = Talk time for ACD calls completed during the interval

B = After call work time in seconds for ACD calls completed during the interval

AVERAGE HANDLE TIME

The average handle time during the interval.

Average handle time = (A + B) ÷ C

Where:

A = Total talk time for ACD calls completed during the interval

B = Total after contact work time for ACD calls completed during the interval

C = Total number of ACD calls completed during the interval

AVERAGE HANDLE TIME ACTUAL

The actual average handle time during the interval.

Average handle time actual = Total handle time actual ÷ calls handled

AVERAGE HANDLE TIME FORECAST

The forecasted average handle time during the interval.

Average handle time forecast = Total handle time forecast ÷ calls offered forecast

AVERAGE HOLD TIME

The average amount of time agents placed calls on hold during the interval, including hold time for transfers and conferences.

Average hold time = A ÷ B

Where:

A = Amount of time agents placed calls on hold during the interval, including hold time for transfers and conferences

B = Number of calls placed on hold during the period. The call might have been placed on hold multiple times.

AVERAGE NOT READY TIME

The average amount of time the agent is in the Not Ready agent state.

Average not ready time = A ÷ B

Where:

A = The amount of time the agent is in the Not Ready agent state during the interval

B = Number of contacts completed during the interval

AVERAGE QUALITY SCORE

The average quality score of calls the agent completed during the interval. The quality scores come from calls that are evaluated using Call Recording and Quality Management.

Average quality score = A ÷ B

Where:

A = Sum of the overall quality scores for evaluated calls the agent

completed during the interval

B = Total evaluated calls the agent completed during the interval

AVERAGE READY TIME

The average amount of time the agent is in the Ready agent state.

Average ready time = A ÷ B

Where:

A = The amount of time the agent is in the Ready agent state during the interval

B = Number of contacts completed during the interval

AVERAGE SPEED OF ANSWER

The average amount of time callers spend in queue waiting for their calls to be answered.

Average speed of answer = A ÷ B

Where:

A = Queue time of calls that were answered during the interval. Queue time includes the time from when the ACD queues the call to the service queue until the time when the agent answers the call.

B = Number of calls for the service queue that were answered during the interval.

AVERAGE SPEED OF ANSWER TIME ACTUAL

The actual average amount of time callers spend in queue waiting for their calls to be answered.

AVERAGE SPEED OF ANSWER TIME FORECAST

The forecasted average amount of time calls spend in queue waiting for their calls to be answered.

AVERAGE TALK TIME

The average talk time during the interval.

Average talk time = A ÷ B

Where:

A = Talk time for ACD calls completed during the interval

B = Number of ACD calls completed during the interval

The value for A includes Hold time in the following reports:

- Agent Interval Report
- Interval Service Queue Report
- Agent Service Queue Interval Report
- Service Queue Agent Interval Report
- Team Agent Interval Report
- Team Interval Report

For all other reports that include Average Talk Time, the value for A does not include Hold time.

AVERAGE TALK TIME ACTUAL

The actual average talk time during the interval.

AVERAGE TALK TIME FORECAST

The forecasted average talk time for the interval.

AVERAGE AFTER CONTACT WORK TIME ACTUAL

The actual after contact work time during the interval.

AVERAGE AFTER CONTACT WORK TIME FORECAST

The forecasted average after contact work time during the interval.

AVERAGE WORK TIME

The average after contact work time during the interval.

Average work time = A ÷ B

Where:

A = After contact work time for contacts completed during the interval

B = Number of contacts completed during the interval

BREAK

The amount of break time scheduled for the agent during the interval.

BREAK PAID

The amount of paid break time scheduled for the agent during the interval.

BREAK UNPAID

The amount of unpaid break time scheduled for the agent during the interval.

BUSY OTHER STATE TIME

The amount of time the agent is logged in but is not in service during the interval.

CALLS ABANDONED

The number of ACD calls routed to the service queue during the interval where the caller hung up while in queue or while ringing at the agent's phone. Calls are counted for the interval in which the caller hung up.

CALLS ANSWERED

The number of ACD calls answered during the interval for the service queue. Calls are counted in the interval in which they are answered.

CALLS HANDLED

The number of ACD calls the agent completed during the interval.

CALLS INBOUND

The number of inbound ACD calls the agent completed during the interval.

CALLS OFFERED ACTUAL

The actual number of calls routed to the service queue during the interval. The total includes calls that are initially offered and then dequeued and calls that are queued to

multiple service queues. In most cases the call is counted in the interval during which it is routed to the service queue.

CALLS OFFERED FORECAST

The forecasted number of calls routed to the service queue during the interval.

CALLS PER HOUR

The number of ACD calls received per hour.

Calls per hour = (A × 3600) ÷ B

Where:

A = Number of calls handled during the hour

B = Total in service time during the hour

CALLS REFORECAST

The reforecasted number of calls routed to the service queue during the interval.

CALLS TRANSFERRED

The number of ACD calls the agent transferred during the interval.

CLOSED

The amount of closed time scheduled for the agent during the interval. Closed time is time scheduled for the agent during contact center closed hours, when the contact center is not accepting calls for the service queue.

CLOSED PAID

The amount of paid closed time scheduled for the agent during the interval.

CLOSED UNPAID

The amount of unpaid closed time scheduled for the agent during the interval.

CONFORMANCE % (CONFORMITY %)

Conformance is the percentage of time an agent works the right amount of time regardless of the time of day the agent works. Schedule conformance does not take

arrival and departure times into account. For example, an agent who is scheduled to work from 08:00 to 16:00 but instead works from 10:00 to 18:00 would be conforming, but not adhering, to the schedule.

Conformance is calculated according to the following formula:

Conformance % = (A ÷ B) × 100

Where:

A = Total time during the interval the agent is in service, whether or not scheduled to be in service

B = Total time during the interval the agent is scheduled to be in service, whether or not the agent is actually in service

COST PER CALL

The average cost per call for the day.

DAILY BUDGET

The calculated total cost for the day.

DATE

The date of the reported information.

DAYS OFF APPROVED HOURS

The total amount of days off hours that have been approved for an agent to date.

DAYS OFF REMAINING HOURS

The total amount of days off hours that an agent has remaining to date.

DAYS OFF TOTAL HOURS

The total amount of days off hours available to an agent.

DAYS OFF USED HOURS

The total amount of days off hours used by the agent to date.

DEP

The work shift departure (end of shift) time.

DURATION

The length of time an activity lasts.

END

The them of the end of the day or interval.

END DATE

The end date of the reported information.

END TIME

The end time of day.

ENTIRE DAY

An exception that lasts the entire work shift.

EXCEPTION

The name of the exception.

EXCEPTION PAID

The amount of paid exception time scheduled for the agent during the interval.

EXCEPTION UNPAID

The amount of unpaid exception time scheduled for the agent during the interval.

FIRST NAME

The agent's first name.

FLOATING HOLIDAY APPROVED HOURS

The total amount of floating holiday hours that have been approved for an agent to date.

FLOATING HOLIDAYS REMAINING HOURS

The total amount of floating holidays hours that an agent has remaining to date.

FLOATING HOLIDAYS TOTAL HOURS

The total amount of floating holidays hours available to an agent.

FLOATING HOLIDAYS USED HOURS

The total amount of floating holidays hours used by the agent to date.

FORECAST ACCURACY

The percentage of forecasted calls to actual calls offered for the service queue during the interval.

Forecast accuracy = (A ÷ B) × 100

Where:

A = Forecasted calls for the service queue during the interval

B = Actual calls offered for the service queue during the interval

FORECAST AVERAGE HANDLE TIME

The forecasted average talk time plus the forecasted average work time.

Forecast average handle time = Total forecast handle time ÷ Forecast calls offered

FORECAST CALLS OFFERED

The number of ACD calls forecasted to be routed to the service queue during the interval.

FTE

The number of full time equivalent (FTE) employees.

HANDLED %

The percentage of calls handled by the agent out of he total number of calls offered to the agent.

Handled % = (A ÷ B) × 100

Where:

A = The number of ACD calls handled by the agent while logged in during the interval

B = The total number of ACD calls offered to the agent while logged in during the interval

HANDLE TIME ACCURACY

A measure of how accurate the forecast handle time is.

Handle time accuracy = (A ÷ B) × 100

Where:

A = Forecast average handle time

B = Actual average handle time

HOURLY RATE

The wage rate used in the calculations of the report.

HOURS IN SERVICE

The total number of in service hours for the day.

IN SERVICE

The amount of agent in-service time scheduled during the interval for the service queue.

IN SERVICE HOURS

The number of hours the agent is scheduled to be in service.

IN SERVICE TIME

The amount of time the agent is logged in during the interval.

INTERVAL

The start time of the half-hour schedule interval.

INTERVAL BUDGET

The total cost for the interval requested.

LAST NAME

The agent's last name.

LUNCH

The amount of lunch time scheduled for the agent for the interval.

LUNCH PAID

The amount of paid lunch time scheduled for the agent for the interval.

LUNCH UNPAID

The amount of unpaid lunch time scheduled for the agent for the interval.

MONTH

The name of the month in ISO format (MM).

OCCUPANCY %

The percentage of time the agent spends answering ACD calls to the total amount of time the agent is logged in and ready to take calls during the interval.

Occupancy % = A ÷ B

Where:

A = The total handle time

B = Total in service time

OCCUPANCY % ACTUAL

The actual percentage of time the agent spends answering ACD calls to the total amount of time the agent is logged in and ready to take calls during the interval.

Occupancy % actual = (A – B) ÷ A

Where:

A = in service time

B = Ready time

OCCUPANCY % FORECAST

The forecasted percentage of time the agent spends answering ACD calls to the total amount of time the agent is logged in and ready to take calls during the interval.

Occupancy % forecast = Sum(occupancy forecast) ÷ Sum(calls offered forecast)

PAID HOURS ASSIGNMENT

The amount of paid assignment time scheduled for the agent for the interval.

PAID HOURS BREAK

The amount of paid break time scheduled for the agent for the interval.

PAID HOURS CLOSED SERVICE

The amount of paid closed service queue time scheduled for the agent for the interval.

PAID HOURS EXCEPTION

The amount of paid exception time scheduled for the agent for the interval.

PAID HOURS LUNCH

The amount of paid lunch time scheduled for the agent for the interval.

PAID HOURS PROJECT

The amount of paid project time scheduled for the agent for the interval.

PAID HOURS TOTAL

The total paid hours for the interval.

Paid hours total = In Service Hours + Paid Hours Break + Paid Hours Lunch + Paid Hours Exception + Paid Hours Project + Paid Hours Assignment + Paid Hours Closed Service

PERCENT ASSIGNMENT

The percentage of scheduled assignment time for the interval.

Percent assignment = (A ÷ B) × 100

Where:

A = Scheduled assignment work time for the interval

B = Total scheduled time for the interval

PERCENT BREAK

The percentage of scheduled break time for the interval.

Percent break = (A ÷ B) × 100

Where:

A = Scheduled beak time for the interval

B = Total scheduled time for the interval

PERCENT CLOSED

The percentage of closed time for the interval.

Percent closed = (A ÷ B) × 100

Where:

A = Scheduled closed time for the interval

B = Total scheduled time for the interval

PERCENT EXCEPTION

The percentage of exception time for the interval.

Percent exception = (A ÷ B) × 100

Where:

A = Scheduled exception time or the interval

B = Total scheduled time for the interval

PERCENT IN SERVICE

The percentage of in service time for the interval.

Percent in service = (A ÷ B) × 100

Where:

A = Scheduled in service time for the interval

B = Total scheduled time for the interval

PERCENT LUNCH

The percentage of lunch time for the interval.

Percent lunch = (A ÷ B) × 100

Where:

A = Scheduled lunch time for the interval

B = Total scheduled time for the interval

PERCENT OVERTIME

The percentage of overtime time for the interval.

Percent overtime = (A ÷ B) × 100

Where:

A = Scheduled overtime time for the interval

B = Total scheduled time for the interval

PERCENT PROJECT

The percentage of project time for the interval.

Percent project = (A ÷ B) × 100

Where:

A = Scheduled project time for the interval

B = Total scheduled time for the interval

PERSONAL DAYS APPROVED HOURS

The total amount of personal days hours that have been approved for an agent to date.

PERSONAL DAYS USED HOURS

The total amount of personal days hours that an agent has remaining to date.

PERSONAL DAYS TOTAL HOURS

The total amount of personal days hours available to an agent.

PERSONAL DAYS USED HOURS

The total amount of personal days hours used by the agent to date.

PRECISION %

The gap between forecasted calls and actual offered calls, expressed as a percentage.

Precision % = (A ÷ B) × 100

Where:

A = Forecasted calls

B = Actual calls offered

PROJECT

The amount of project time scheduled for the agent for the interval.

PROJECT PAID

The amount of paid project time scheduled for the agent for the interval.

PROJECT UNPAID

The amount of unpaid project time scheduled for the agent for the interval.

READY STATE TIME

The amount of time the agent is logged in and waiting to take an ACD call during the interval.

SECONDS SERVICE LEVEL SCHEDULED

The scheduled number of seconds within which a call must be answered if it is to meet the service level objective.

SERVICE

The service queue that the agent is supporting.

SERVICE LEVEL

The percentage that describes the achievement of goals for customer call handling per interval.

For example, if your goal is an average speed of answer of 20 seconds or less, and 80% of your calls are answered in 20 seconds or less, then your service level is 80%.

Service level percentage = [(A + B) ÷ (C + D)] × 100

Where:

A = The number of calls for the service queue the caller abandoned during the interval and were in queue less than the service level number of seconds

B = The number of calls for the service queue an agent answered during the interval and for which the queue time was less than the service level number of seconds

C = The number of calls for the service queue that the caller abandoned during the interval, regardless of the time the call was in queue

D = The number of calls for the service queue an agent answered during the interval, regardless of the time the call was in queue

SERVICE LEVEL % ACTUAL

The actual service level percentage, a speed of answer goal that is often expressed as a percentage for answering calls within a specified number of seconds.

See Service Level for how this value is calculated.

SERVICE LEVEL % FORECAST

The forecasted percentage of calls answered within the service level threshold time per interval.

See Service Level for how this value is calculated.

SERVICE LEVEL % GOAL

The goal percentage of calls to be answered within the service level threshold time, per interval.

See Service Level for how this value is calculated.

SERVICE LEVEL % SCHEDULED

The anticipated percentage of calls answered within the service level threshold time, per interval. This is a real time calculation made when the report is generated.

See Service Level for how this value is calculated.

SERVICE LEVEL % SHRINKAGE

The anticipated service level percentage based on the anticipated agents after shrinkage.

For example, if you have a Service Level % Scheduled of 80%, and 10 agents scheduled with a Shrinkage % of 10%, then Agents Shrinkage would be closer to 9 agents and the Service Level % Shrinkage would be less than 80%.

See Service Level for how this value is calculated.

SERVICE QUEUE

The name of the service queue that the agent supports.

SHIFT LENGTH

The length of a work shift for a service queue.

SHRINKAGE %

The shrinkage rate that is configured on the Shrinkage page (Application Management > Shrinkage).

START

The start time of the day or period.

START DATE

The start date of the reported information.

START TIME

The start time of the work shift.

TEAM

The name of the team.

TEAM NAME

The name of the team.

TOTAL

The total time scheduled for the agents supporting the service queue for the interval.

Total = In Service + Break + Lunch + Exception + Project + Assignment + Closed

TOTAL CALLS

The total number of calls for the day.

TOTAL HANDLE TIME

For service queues:

Total handle time = talk time (including hold time) + after contact work time

For agents:

Total handle time = talk time + hold time + after contact work time

TOTAL HOLD TIME

Total hold time is the total time the agent placed calls on hold, including hold time for transfers and conferences, during the interval.

TOTAL IN SERVICE TIME

Total in service time is the total time, in seconds, during the period the agent was in a state ready to take an ACD call or was handling an ACD call.

TOTAL LOGIN TIME

The total login time for the agent during the interval.

TOTAL NOT READY TIME

Total Not Ready time is the total time the agent was in the Not Ready agent state during the interval.

TOTAL PAID

The total hours of paid time scheduled for the interval.

Total paid + Break Paid + Lunch Paid + Exception Paid + Project Paid + Assignment Paid + Closed Paid

TOTAL READY TIME

Total Ready time is the total time the agent was in the Ready agent state during the interval.

TOTAL TALK TIME

Total talk time is the total time, in seconds, the agent was on ACD calls. The time runs from when the agent answers an ACD call until when the agent disconnects the call, and includes hold time.

TOTAL UNPAID

The total hours of unpaid time scheduled for the interval.

TOTAL WORK TIME

Total work time is the total time the agent was in the Work agent state during the interval.

USERNAME

The agent's username.

UTILIZATION %

Utilization percentage is the percentage of time the agent spends answering ACD calls to the total amount of time the agent is logged in during the interval.

Utilization % = A ÷ B

Where:

A = Total handle time

B = Total in session (login) time

VACATION APPROVED HOURS

The total amount of vacation hours that have been approved for an agent to date.

VACATION REMAINING HOURS

The total amount of vacation hours that an agent has remaining to date.

VACATION TOTAL HOURS

The total amount of vacation hours available to an agent.

VACATION USED HOURS

The total amount of vacation hours used by the agent to date.

WEEKLY BUDGET

The total cost for the week.

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