



PureConnect®

2023 R3

Generated:

09-November-2023

Content last updated:

21-July-2020

See **Change Log** for summary of changes.



Interaction Optimizer

Printed Help

Abstract

This document contains the application help for Interaction Optimizer.

For the latest version of this document, see the PureConnect Documentation Library at: <http://help.genesys.com/pureconnect>.

For copyright and trademark information, see https://help.genesys.com/pureconnect/desktop/copyright_and_trademark_information.htm.

Table of Contents

Table of Contents	2
About Interaction Optimizer	9
Interaction Optimizer Home page	9
Scheduling Unit	9
Configuration area	9
Forecasts	10
Scheduling area	10
Intraday Management	10
Time Off Planning	10
Customer Experience Improvement Program	11
Participate in the program	11
Opt out of the program	11
Using the Schedules, Schedule Bid, and Forecasts grid	12
Accessing the grid	12
Keyboard shortcuts	12
Mouse shortcuts	12
View the Upgrade Log	13
Tips and troubleshooting	14
Database connectivity and Optimizer restart	14
Forecast editor slowed performance	14
Notifications to Agent Group and Shift views	14
Default frequency of staffing group updates	14
About status mapping	15
Understanding activity types	15
Map status messages to activity types	16
Out of adherence example	16
Map a status message to an activity type	16
Filter and sort status messages and activity types	17
Working with activity codes	18
Add an activity code	19
Edit or delete an activity code	20
Edit an activity code	20
Delete an activity code	20
Manage day classifications	21
Manage day classifications	21
Assign day classifications to specific days	22
Configuration Overview	23
Working with Scheduling Units	24
Create a new scheduling unit	25
Configure Scheduling Unit parameters	26
About service goal groups	26
Create schedule and forecast names and configure date settings	32
Configure how many weeks of data to use in the forecast	33
Set agent schedule impact, deferred work threshold, unstaffed shrinkage, and activity bidding preferences	34
About schedule calibration	35
Configure unplanned shrinkage	35
Select adherence exceptions settings and conformance calculations	36
Agent Groups	37
Add Agent Group	37
View and Filter Agents in the Agent Groups	38
View Agent Rankings	42
View or Edit Agent Data	43
About staff types	43
Create a staff type	44
Add agents to a staff type coverage group	44
Working with Shifts	45
Configure Shifts	45
Shift Display Options	50
Understanding Shift validation	50
Validate Shifts	51
Sort and Filter Shifts	52

Show Agent Issues	53
About shift rotations	54
Add a shift rotation	54
Manage a shift rotation	55
Assign agents to a shift rotation	56
View the shift report	57
About the Agent Details view	57
Display Name	57
User Name	57
Start Date	57
End Date	57
Accrual Reference Date	57
Team	58
Workgroups	58
Shift	58
Shift Rotation	58
Agent Group	58
Manage the Agent Details view	59
Add a team	59
Add agents to a team	60
Manage teams	60
View the Upgrade Log	61
Review data about agent details	61
Operating limits	61
How to view operating limits for a scheduling unit	62
Forecasting overview	66
About forecast deletion	66
Working with short-term forecasts	67
AI-powered forecasting	67
Local forecasting	69
Create a new forecast	71
Add days to a forecast	71
Add a forecast modification	74
Manage a modification	77
Configure forecast display options	77
Export coverage to Excel	79
AI-powered forecast reports	79
Working with long-term forecasts	81
Create a new long-term forecast	82
Create representative weeks for a long-term forecast	82
Long-term forecast generation	83
Working with the long-term forecast editor	83
Add or edit a long-term forecast modification	83
Regenerate a long-term forecast	85
Rename a long-term forecast	86
Set up long-term forecast display options	87
Generate staffing requirements	88
Generate Staffing Requirements shrinkage override dialog box	88
Import Required Staffing dialog box	89
Scheduling Overview	90
View Schedule in Day Mode	90
View Schedule in Multi-day Mode	90
View Schedule in Week Mode	91
AI-powered scheduling	91
Create an AI-powered schedule	92
AI-powered schedules in the Schedules tab	92
Local scheduling	93
Create a local schedule	93
Local schedules in the Schedules tab	94
View Schedule Preferences	95
View the agent's scheduling preferences	95
View the Status Bar	96
Create and Manage Weekly Schedules	96
Create a New Week Schedule	97
Edit Base Schedule	98

Modify Activity Details	100
View the Base Schedule Editor Calendar	101
Rename a Schedule	101
Manage schedules and schedule data	102
Synchronize time off requests and time off activities	103
View actual work and RTA exceptions	104
Change the forecast associated with a schedule	105
Excuse RTA exceptions	105
View analysis and summary counts	106
Use Reforecasting in Scheduling	108
Export data	110
Export coverage to Excel	111
Display graphs	111
View the Status Bar	112
Use filter and sort options	113
Schedule Bidding Overview	113
Terms	114
Agent groups and priority ranking	114
Schedule bidding configuration options	114
Agent interface to schedule bidding	114
Add a Schedule Bid	116
Schedule Bidding Options	117
Schedule Bidding Times	117
Schedule Bidding Agents	118
Schedule Bidding Shifts	118
Schedule Bidding Minimums and Maximums	119
Schedule and Schedule Bid Generation	120
Manage Schedule Bids	121
Activate a Schedule Bid	122
Open and Close Schedule Bidding	123
View, Modify, and Delete Schedule Bids	124
Change Schedule Bidding Times	125
View Agent Details	125
View Agent Schedule Bids	126
Process a Schedule Bid	126
View Schedule Bid Details	127
Assign Schedule to Agent	128
Bid Outcome Statistics	128
Schedule Display Options	129
Change Activity Colors	129
Change Display	130
Change Messages	131
Change Export Behavior	132
Edit Schedules	133
Understanding time off synchronization	134
Synchronize time off requests and time off activities	135
Enter Publish Notes	135
Edit Activities	136
Agent Actions	143
Work with agent-initiated shift trades	151
About Shift Trading configuration	151
About Shift Trading Requests	153
Shift trade status values	154
Enable shift trading	156
Configure shift trade requirements	157
Review agent matching criteria for shift trading requests	158
Set agent matching criteria for shift trading requests	159
Specify activity type rules for shift trade requests	160
Approve a matched shift trade request	161
Denial of shift trade requests	162
Deny shift trade request or shift trade match	163
Filter and sort shift trade requests	164
Select a range of shift trade requests to view	164
Refresh the shift trade date range	165
Intraday Management Overview	166
Intraday Monitoring Overview	166

Use the Intraday Monitoring Data Table	166
Use Intraday Monitoring in Graph View	170
Set Intraday Monitoring Display Options	172
Real Time Adherence Overview	177
Use the Real time Adherence Wizard	177
Working with Real time Adherence	178
Reforecasting Overview	180
Use Reforecasting in Intraday Monitoring	180
Configure Advanced Reforecast Settings	181
Understanding adherence management	184
View adherence exceptions	184
Search for adherence exceptions	187
Refresh the list of adherence exceptions	188
Excuse a all or part of a single adherence exception	188
Excuse adherence exceptions using default values	189
Time Off Planning Overview	190
About automatic time off processing	190
Accrual plan overview	192
Create an accrual plan	193
Configure an accrual plan	193
Define accrual period dates	195
Set up accrual plan rates	196
Select agents to include in the accrual plan	197
Edit an accrual plan	197
Rename an accrual plan	198
Make a copy of an existing accrual plan	198
Copy an accrual plan to another scheduling unit	199
View agent accruals	200
Time off planning with the allotment editor	200
Interaction Optimizer menu options	201
Graph display options	201
Graph Area	201
Data point grid	202
Edit a time off plan	202
Activate a time off plan	203
Rename a time off plan	203
Make a copy of an existing time off plan	204
Modify a time off plan's allotment	204
Set up a representative schedule	205
Download the predicted staff template	205
Import predicted staff	206
Change time off plan display options	206
View agent accruals	207
Working with time off requests	208
Add a time off request	209
Approve or deny a time off request	210
Cancel a time off request	210
Edit a time off request	211
Filter and sort time off requests	212
View pending time off requests	212
Select a range of time off requests to view	213
Synchronize time off requests and time off activities	214
Export a list of time off requests	215
Miscellaneous Commands and Quick Keys	216
Miscellaneous Commands	216
Save	216
Publish	216
Zoom In	216
Zoom Out	216
Quick Keys	217
Optimizer server parameters	217
Default frequency of staffing group updates	217
Maximum agents per scheduling unit	217
Miscellaneous topics	218
Accrual Rates for Selected Agents area	218

Agent	218
Reference Date	218
Accrued Balance	218
Rate	218
Period	218
Override Rate	218
Override Period	218
Accrued Cap Override	218
Add Days dialog	219
Add Modification dialog	220
Add or Edit Shift Activities	220
To edit an activity:	222
Add or remove view columns	223
Add or remove a column	223
Additional Information on Reforecast Interactions	223
Change Agent Group Display Options	223
To change the display options:	223
Agent Groups tab	224
Allotment Cap List dialog box	225
Activate Schedule Bid button	225
Add Activity button	225
Add button	226
Approve proposed shift trade button	226
Approve a Time Off Request button	226
Browse button	226
Change Dates button	226
Copy to another scheduling unit button	227
Copy button	227
Date Range button	227
Day View button	227
Excuse Exceptions using Default Values button	228
Delete button	228
Deny entire shift trade request button	228
Deny pending shift trade match button	228
Deny Time Off Request button	229
Dimensions button	229
Display Options button	229
Edit button	229
Export to Excel button	230
Export button	230
Filter and Sort button	230
Open Selected button	230
Graph Type button	230
Graph button	231
Import Source Data button	231
Manage Day Classifications button	231
Add button	231
Multi Day View button	232
Open Selected button	232
Paste button	232
Print button	232
Process Bids button	233
Publish Selected Schedule button	233
Reforecast button	233
Refresh Screen button	233
Rename Selected Schedule button	234
Save button	234
Excuse Single Exceptions button	234
Source Data button	234
Source Data button	235
Validate button	235
View Report button	235
Week View button	235

Choose which time off requests to view	236
Choose which time off requests to display	236
Command Buttons	237
Create a new time off plan	238
Create New Accrual Plan dialog box	238
Create Week Entry	239
To create a week entry:	239
Criterion definitions	240
Deferred work	240
Delete a Schedule Bid	240
To delete a schedule bid:	240
Excuse Exception dialog box	241
Forecast Display Options dialog box	241
Forecast Editor dialog	242
Administration Navigation Pane	242
Interaction Optimizer Module Licensing	243
Long-term forecast generation page	243
Working with Scheduling Units	244
To set the Agent Schedule Preference Versus Coverage Focus setting:	244
New Forecast dialog	245
Additional Resources	245
After Call Work	245
Agent Information Area	245
Apply Time Off Requests	247
Apply time off requests	247
Average Handle Time	247
Change Activity Defaults	248
Make changes to activity defaults	248
Change General Display Options	248
Changes general schedule appearance	248
Paste Group Activity	249
Coverage Estimation Algorithm	250
Full Time Equivalent	250
Status Bar	250
Menu Bar	250
Navigation Pane Buttons	250
Navigation Pane	251
Paste Multiple Activities	251
RTA Exception Conflicts	251
Scheduling Navigation Pane	253
Start Time Picker	253
Toolbars	254
View Schedule in Day Mode	254
View Schedule in Multi-day Mode	254
View Schedule in Week Mode	254
Workspace	255
Rename a Schedule Bid	255
To rename a schedule bid:	255
Rename Forecast dialog	255
To rename a forecast	255
Save and Validate Shifts	256
Schedule Bid Generation	256
Schedule Shift Activities	257
Scheduling Unit dropdown list	257
Select days from calendar dialog	257
Select Statistics dialog	258
To manage statistics:	258
Send an error report to Genesys	259
Source Data dialog	260
Time Off Request dialog box	260
Agent	260
Activity Code	260
Type	260

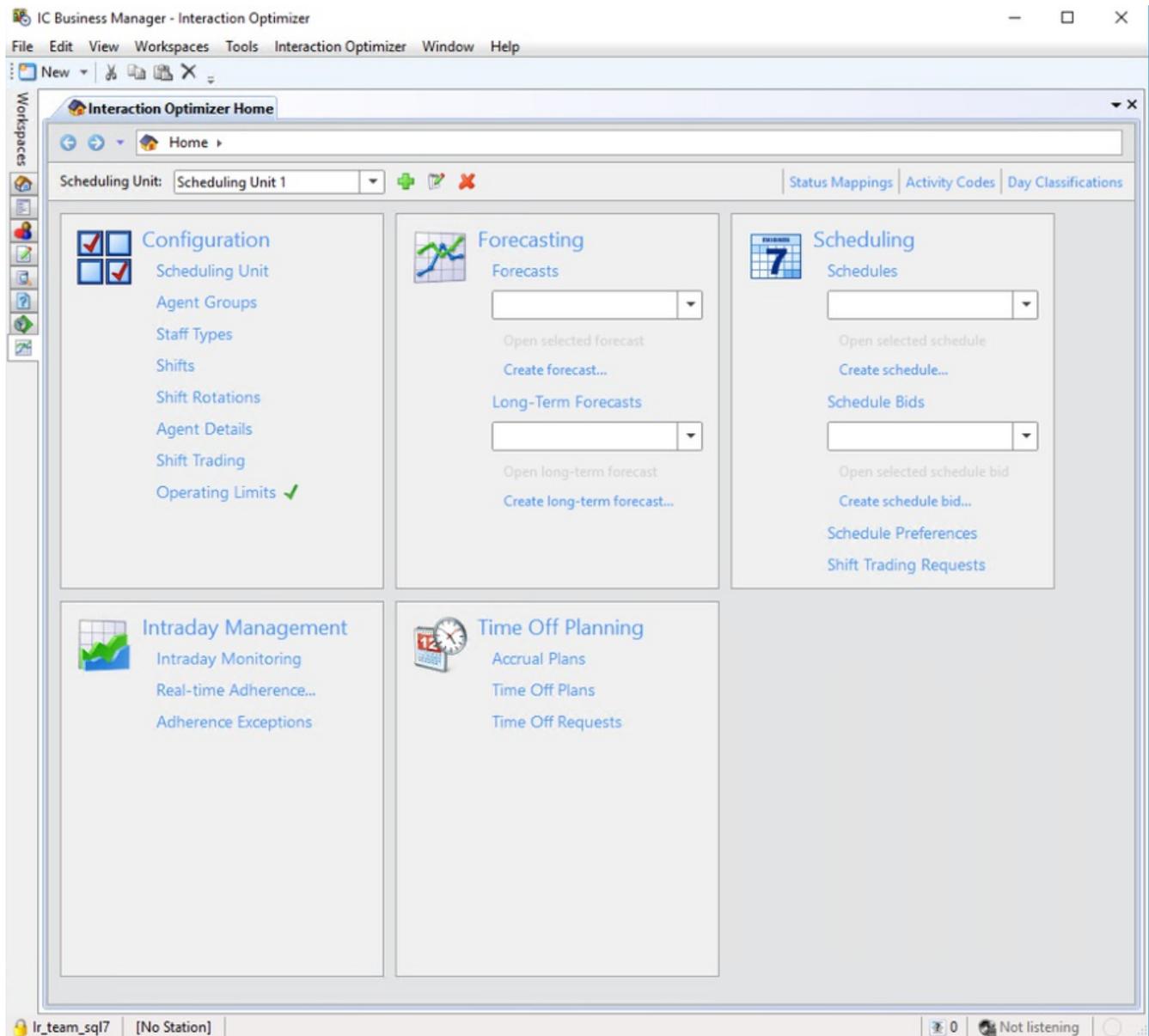
State	260
Start	261
End	261
Length	261
Use Paid Time	261
Notes	261
Submitted by	261
Not reviewed or Approved by	261
Understanding automatically approved time off requests	262
Understanding automatically denied time off requests	263
Understanding pending or waitlisted requests	264
Validate Base Schedule Edits	264
To validate a base schedule:	264
Validate Base Schedule	265
To validate a base schedule:	265
Change log	266
4.0 SU 5	266
Scheduling unit management	266
Activity codes	266
Status mapping	266
Time off requests	266
Adherence exceptions	267
Shift rotations	267
New scheduling engine	267
Customer Experience Improvement Program	267
4.0 SU 6	267
Service goal group updates	268
Create and manage staff types and coverage groups	268
Monitor agent information in the new Agent Details view	268
Use the new Time Off Planning features	268
Manage time off requests	268
Export coverage to Excel	268
View the Upgrade Log	268
2015 R1	269
2015 R2	269
Long-term forecasting	269
Manage day classifications	269
Deleting forecasts	269
Synchronize time off activities and requests	269
Tips and troubleshooting	269
2015 R4	270
General enhancements	270
Shift trading configuration and management	270
Change the forecast within a schedule	270
Additional server parameters	270
2016 R1	270
General enhancements and updates	270
2016 R2	271
General enhancements and updates	271
2017 R1	271
Export time off request data	271
2017 R4	271
2018 R2	271
2018 R3	271
2018 R4	271
2018 R5	271
2019 R1	272

About Interaction Optimizer

Interaction Optimizer is an add-on module for IC Business Manager that makes it easier to navigate your options when performing typical workforce management tasks. The interface includes menus, toolbars, navigation links, and a workspace. For basic information on using the IC Business Manager interface, see **Getting Started** on the Help menu.

To learn more about the Interaction Optimizer interface features, hover over the menu bar, toolbar, or navigation areas on the graphic below, and click to display more information.

Interaction Optimizer Home page



Scheduling Unit

Use the drop-down list to select the Scheduling Unit you want to manage. To create a new Scheduling Unit, click the plus sign.

Configuration area

- [Scheduling Units](#). Configure default values for properties, including week name, schedule name, agent preference slider, and so forth.
 - [Agent Groups](#). Define which agents will be compared for schedule bidding and schedule preference choices.
 - [Staff types](#). Staff types help configure groups of agents that will have access to the same allotment pools.
 - [Shifts](#). Define the properties for scheduling, including weekly constraints, daily constraints, and activities.
 - [Shift Rotations](#). Define which agents will rotate through shifts each week, and set the order in which the shifts are used.
 - [Agent details](#). View and modify specific agent-related information.
 - [Shift tracking](#). Define the setting for agent-initiated trading of schedules or partial schedules.
 - [Operating limits](#). View operating limits for a scheduling unit.
-

Forecasts

The [Forecasts](#) area of the Interaction Optimizer Home page allows authorized users to manage forecasts. Use this area to create, edit, and remove short- and long-term forecasts.

Scheduling area

- [Schedules](#). Manage weekly schedules, including creating, editing, publishing, and removing them.
 - [Schedule Bids](#). Manage schedule bids, including creating, editing, activating, and removing them.
 - [Schedule Preferences](#). Show the preferences for when to work or not work for the agents who belong to the current scheduling unit.
 - [Shift Trading Requests](#). View all unmatched, in progress, and completed shift trades.
-

Intraday Management

The Intraday Management area of the Interaction Optimizer Home page allows authorized users to analyze actual versus forecasting data, reforecast based on current daily trends, and provides the latest schedule adherence information for currently scheduled agents

- [Intraday Monitoring](#). Show actual activity on a specific day, compared to forecast data. Allows reforecasting based on current daily trends.
 - [Real-time Adherence](#). Provides the latest schedule adherence information for currently-scheduled agents.
 - [Adherence Exceptions](#). View and excuse adherence exceptions.
-

Time Off Planning

- [Accrual plans](#), which show the rate at which groups of agents receive more time off in specified activity codes.
- [Staff types](#), which group agents with similar workgroups, interaction types, and skills. Staff types ensure time off isn't given to all the agents in one type or category on the same day.
- [Time Off Requests](#). Approve or deny time off requests.

Customer Experience Improvement Program

Genesys strives to consistently improve the quality, efficiency, and performance of Interaction Optimizer. You can help by participating in the Customer Experience Improvement Program. If you choose to participate, Genesys collects statistical information from your system and uses it only to help improve Interaction Optimizer features and enhancements and to help resolve issues.

Genesys does not share this information with other companies, nor does it use your data for marketing or sales purposes. All information is confidential. Participation is voluntary and you can opt in or out at any time.

Participate in the program

1. From the Interaction Optimizer Home page, open the Interaction Optimizer menu and select **Customer Experience Improvement Program**.
2. Select **Join the Interaction Optimizer Customer Experience Improvement Program** and click **OK**.

Opt out of the program

1. From the Interaction Optimizer Home page, open the Interaction Optimizer menu and select **Customer Experience Improvement Program**.
2. Select **I do not want to join the program at this time** and click **OK**.

Using the Schedules, Schedule Bid, and Forecasts grid

From the Interaction Optimizer Home page, you can access a list of all schedules, schedule bids, or forecasts for each scheduling unit. Within each list, you can perform a variety of tasks to help quickly manage each entity:

- Create, open, publish, copy, rename, and delete selected schedules.
- Create, open, activate, rename, and delete selected schedule bids.
- Create, open, copy, rename, and delete selected forecasts as well as manage day classifications.

Note: Before you navigate to a particular list, make sure you select the appropriate scheduling unit from the [Interaction Optimizer Home page](#) Scheduling unit drop-down list.

Accessing the grid

From the Interaction Optimizer Home page:

- To view and manage schedules, in the **Scheduling** area click the **Schedules** link.
- To view and manage schedule bids, in the **Scheduling** area click the **Schedule Bids** link.
- To view and manage forecasts, in the **Forecasts** area click the **Forecasts** link.

Keyboard shortcuts

The following tips can be used from your keyboard to perform certain actions when managing schedules, schedule bids, and forecasts:

- To navigate headers, filters, and rows, use the left and right arrow keys.
- To manage filters, press **Enter** to edit the filter, press **Esc** to clear the filter, and press the spacebar to open the operator selection list.
- To manage headers, press **Enter** to toggle sort, and press the space bar to open the column picker and select information to display.
- To toggle a column in the column picker, press **Enter**. To close it, press the **Esc** key.
- To select multiple schedules, schedule bids, or forecasts listed consecutively with a grid, select one from the list and then hold the **Shift** key and use the up or down arrow to highlight multiple items.
- To select and toggle multiple, non-consecutive items, hold the **Ctrl** key and use the up or down arrow to move to another row, and then press spacebar to add or remove it from the selected rows.

Mouse shortcuts

With your mouse, you can also perform certain actions to help manage schedules, schedule bids, and forecasts:

- Use **Ctrl+Shift** to select multiple rows.
- Right-click a row to open a context menu, with options that include opening, activating or publishing (where applicable), renaming, and deleting the selected items.

View the Upgrade Log

The Upgrade Log lists data changes performed when a service update is applied. Service updates automatically apply changes that move data to new tables or improve the quality of Interaction Optimizer data.

You can access the Upgrade Log from the Interaction Optimizer Home page, or from the Agent Details view and review these upgrade details:

- **Version.** The integer value of the specific upgrade (used as the default sort order).
- **Summary.** The description linked to the upgrade version number.
- **Level.** The level of importance of the record in the upgrade log (for example, Info, Verification Required, Warning, Error). Records with any level other than Info means that you should review the record.
- **Upgrade Date Time.** The date and time the upgrade was performed.
- **Notes.** A full description of an upgrade changes.

Tips and troubleshooting

Database connectivity and Optimizer restart

When database connectivity is down, the Optimizer server will not restart. Instead, the server will periodically retry at some delayed intervals of 0, 30 seconds, 1 minute, 2, 4 up to 15. After 15 minutes, the server attempts to reconnect to the database.

Forecast editor slowed performance

When you modify the selected variables in the Forecast Editor, you may experience temporary slower performance. To help improve performance, open the Display Options dialog box and clear the **Show Counts (may affect performance)** check box.

Notifications to Agent Group and Shift views

In the Agent Group and Shift views, if another user deletes an agent group or a shift that is currently being edited by another user, the green notification (located in the bottom right corner) turns red. This alert indicates that no current or future changes made in this session will be saved and the user should discontinue editing.

Default frequency of staffing group updates

The Optimizer extension in Session Manager listens for changes to the workgroups, interaction types, and skill sets of agents. If any changes are made, then it waits for 30 seconds and re-builds the staffing groups. At the same time, it sends updates back to all the ICBM users that are listening for updates.

The `OptimizerStaffingGroupUpdateFrequencyInMinutes` server parameter controls the number of minutes to wait between updating the Optimizer staffing groups. The default is 15 minutes, but the value can be set to anywhere between 1 to 1440 minutes.

About status mapping

You can map status messages to activity types. An activity type identifies a specific action of an agent. Mapping a status to an activity type is required to determine whether agents are following their schedules.

Open the Status Mappings tab from the [Interaction Optimizer Home page](#). On the Status Mappings tab, you can:

- [Map status messages to activity types](#)
- [Filter and sort status messages and activity types](#)

Understanding activity types

Activity types are mapped to statuses to determine schedule adherence. An activity type identifies a specific action of an agent. Mapping an activity type to a status is required to view schedule adherence data in Interaction Supervisor. When an agent changes status in Interaction Client, the activity mapped to the status is compared to the agent's scheduled activity. If the mapped activity matches the scheduled activity, then the agent is in adherence; otherwise the agent is not in adherence.

Initial mappings are set by Interaction Optimizer Server on its initial startup when properly licensed. The default set of statuses are appropriately mapped, and any customer-added status messages will be mapped to the "Unscheduled" activity. Status messages will retain their previous mapping if they are deleted and then re-created. While multiple statuses can be mapped to the same activity type, each status can be mapped to only one activity type.

Activity codes are sub-sets of activity types, which act as containers for the activity codes. You can use activity codes wherever you use an activity type. This feature allows you to customize and better define the activities your organization uses. These activity codes can be used in schedules, shifts, and time-off requests, as well as shrinkage reporting and detailed schedule editing of future, current, and past schedules.

For more information on managing activity codes, see the [Related Topics](#).

Map status messages to activity types

Use this page to map status messages to activity types. An activity type identifies a specific action of an agent. Mapping a status to an activity type is required to determine whether agents are following their schedules. This information is used to calculate real time adherence and adherence exceptions. When an agent changes status in Interaction Client, that agent will be either in adherence or out of adherence, depending on the "status to activity" mapping.

Initial mappings are set by Interaction Optimizer Server on its initial start-up when properly licensed. New status messages will be mapped to the "Unscheduled" activity. Status messages will retain their previous mapping if they are deleted and then re-created.

Note: When an agent changes his or her status to an activity type, the change is not reflected in the current adherence calculations. Interaction Optimizer Server receives the change and processes RTA updates for the next statistics update.

The Activity Types are:

- ACD
- Break
- Meal
- Meeting
- Non-ACD
- Time Off
- Training
- Unavailable
- Unscheduled

Out of adherence example

Agent John Brown is scheduled for a meal from 1:00 p.m. through 2:00 p.m. Agent Brown sets his status to "At lunch" at 1:00 PM, but does not return until 2:31 PM. When his status does not change back to a scheduled activity at 2:00 p.m. (or the time lapse defined in the grace period), an out of adherence event is generated.

Map a status message to an activity type

1. From the [Interaction Optimizer Home page](#), click the **Status Mappings** link. The **Status Mappings** page opens.
2. In the **Status** column, select the status you want to map to an activity type.
3. In the **Activity Type** column, click the arrow at the end of the activity types drop-down list and select the appropriate activity type.
4. Click the [save](#) button.

Notes: Interaction Optimizer will not reflect changes to the Status to Activity Types mapping in previously captured historical data.

Filter and sort status messages and activity types

You can filter status messages by desired variables. You can also sort messages and activity types in ascending or descending order.

1. To filter status messages:
 - a. In the cell below the **Status** column heading click the [filter](#) button.
 - b. From the drop-down list that appears, select one of the following:
 - Equal To
 - Contains
 - Does Not Contain
 - Not Equal To
 - Starts With

Note: Depending on the filter you selected, a related character appears in the cell below the **Status** heading.

- c. Type the filtering parameters to begin your search.

For example, if you want to view all statuses that begin with the letter "A": Click the filter button, select **Starts With**, and in the cell below the **Status** column heading type "a". Interaction Optimizer lists only statuses that begin with "a".

2. To clear the filter and view all status messages, click the filter button and select **<Clear Filter>** from the menu that appears, or click the "x" at the end of the Status filter field. Interaction Optimizer lists all statuses.
3. To filter by **Activity Type**, in the cell below the **Activity Type** column heading click the arrow at the end of the cell and from the menu that appears, select or deselect the appropriate activity type check boxes to include or remove.
4. To sort by ascending or descending status order, click anywhere in the **Status** column heading.
5. To sort by ascending or descending activity type order, click anywhere in the **Activity Type** column heading.

Working with activity codes

Activity codes are sub-sets of [activity types](#), which act as containers for the activity codes. Use activity codes wherever you use activity types. This feature allows you to customize and better define the activities your organization uses. Use activity codes in schedules, shifts, and time-off requests, as well as shrinkage reporting and detailed schedule editing of future, current, and past schedules.

Administrators can use activity codes to help define scheduling needs. For example, when:

- **An agent calls in sick.** Create sick time activity codes (e.g. paid sick time, unpaid sick time) in the Time Off activity type container. Update the schedule with a sick time activity code to remove the agent from staffing projections and track the sick time activity for shrinkage reporting.
- **An agent uses FMLA.** Create FMLA activity codes (e.g. planned FMLA, intermittent FMLA, unpaid FMLA) in the Time Off activity type container. Update the schedule with the FMLA activity code that matches the agents status to remove the agent from staffing projections and track the sick time activity for shrinkage reporting.
- **A team participates in weekly meetings.** Create a team-specific meeting activity code in the Meeting activity type container. Update the schedule with the meeting activity code to remove those agents from staffing projections and track the activity for reporting purposes.

Use activity codes to measure and manage shrinkage. Activity code data addresses such questions as:

- How much planned and unplanned time was tracked with activity codes as it relates to time in the published schedule
- How much total unplanned shrinkage occurred within a given date range across all agents and all codes
- How much unplanned shrinkage occurred for a specific code within a given date range for all agents or a specific agent
- How much total shrinkage (planned and unplanned) occurred within a given date range across all agents and all codes

Add, edit, delete, and map activity codes to activity types from the **Activity Codes** link on [Interaction Optimizer Home page](#).

Note: Interaction Optimizer limits you to 255 activity codes per activity type.

Note: In an **Activity Type** container, the activity type appears as the default activity code. You cannot edit the default activity code.

Add an activity code

Customized activity codes help define the activities your organization uses. Use activity codes wherever you use activity types. In an Activity Type container, the activity type appears as the default activity code. You cannot edit the default activity code. The agent sees activity codes in Interaction Desktop in the **My Schedule** view, and selects activity codes in the **Time Off Request** dialog box when he or she creates a time-off request.

Note: Interaction Optimizer limits you to 255 activity codes per activity type.

1. From the [Interaction Optimizer Home page](#), click the **Activity Codes** link. The **Activity Codes** tab opens.
2. Click the arrow at the end of the **Activity type** drop-down list and select the activity type that will contain the new activity code.
3. Click the [add](#) button.
4. In the **Name** box, type a short, descriptive name for the activity code.
5. In the **Short Name** box, type an easily recognizable abbreviation for the activity code.
6. If the activity counts toward paid time, select the **Paid** check box.
7. If the activity is planned in advance, select the **Planned** check box.
8. If the activity counts toward contiguous work time, select the **Contiguous** check box.
9. To ignore the activity code for adherence, select the **Ignore for Adherence** check box.

Note: Selecting this check box has no impact on conformance.

10. To specify a default length of time for the activity, in the **Length (minutes)** box type the number of minutes allotted for the activity.

Note: The system uses this information when creating a new activity in the schedule editor or in shift definitions, but you can change existing activity lengths as needed.

11. Click [save](#).

Edit or delete an activity code

Manage activity codes on the **Activity Codes** tab.

Edit an activity code

1. From the [Interaction Optimizer Home page](#), click the **Activity Codes** link. The **Activity Codes** tab opens.
 2. Click the arrow at the end of the **Activity type** drop-down list and select the activity type that contains the activity code you want to edit.
 3. Select the activity code, make the appropriate changes, and click [save](#).
-

Delete an activity code

1. From the [Interaction Optimizer Home page](#), click the **Activity Codes** link. The **Activity Codes** tab opens.
2. Click the arrow at the end of the **Activity type** drop-down list and select the activity type that contains the activity code you want to delete.
3. Select the activity code you want to remove and click the [delete](#) button.

Manage day classifications

Manage day classifications

Use the Add Day Classification dialog to create a new day classification and include it in the forecast.

To manage a day classification:

1. Open the Interaction Optimizer menu and select **Create Day Classification**. The Add Day Classification dialog box opens.
2. Create a new day classification, do the following:
 - In the **Name** field, enter a short, descriptive name for the day classification.
 - To prevent the day classification from being used in short-term forecasts, select the **Exclude from forecast** check box.
 - To prevent the day classification from being used in long-term forecasts, select the **Exclude from long-term forecasts** check box.
 - In the **Description** field, optionally enter more detailed information about this day classification.
 - Click **OK**.
3. To delete a day classification, select the classification you want to remove and click the **Delete** button.
4. To rename a day classification, or change the description, select the **Name** or **Description** field for the day classification you want to change, make your updates, and press **Enter**.
5. To prevent historical days that have this day classification from being used in short-term forecasts, select the **Exclude From Forecast** check box. Or to make the day classification available in forecasts, clear the **Exclude From Forecast** check box.
6. To prevent historical days that have this day classification from being used in long-term forecasts, select the **Exclude From Long-Term Forecast** check box. Or to make the day classification available in forecasts, clear the **Exclude From Forecast** check box.
7. Click **OK** to close the **Day Classifications** dialog box.

Assign day classifications to specific days

In the **Manage Day Classifications** dialog box, assign day classifications to multiple days. This feature is especially helpful when creating long-term forecasts; however, you can access the Manage Day Classifications dialog box in both the short-term and long-term forecasting views.

To manage day classifications:

1. Click the [Manage Day Classifications](#) button. The **Day Classifications** dialog box opens. The [Add View - Manage Day Classifications](#) dialog box opens.
2. Select the desired scheduling unit and click **OK**. The Manage Day Classifications dialog box opens.
3. Use the calendars to click and select the dates to which Optimizer assigns the day classification.
4. In the **Day classification to set** drop-down list, choose the desired classification and click **Set Classification**.
5. Repeat steps 3 and 4 for each day classification type to assign
6. Use the buttons at the bottom of the dialog box to update and modify the selected assignments.

Configuration Overview

The Configuration area of the Interaction Optimizer Home page includes tools to help you configure scheduling units, define agent groups, set up shift properties, and create shift rotations.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

Configuration Link	Purpose
Scheduling Units	Configure default values for properties including agent schedule preference versus coverage focus, week name, schedule name, and activity bidding.
Agent Groups	Define which agents will be compared for schedule bidding and schedule preference choices, add agent groups, filter agents within agent groups, view agent ranking, edit agent data.
Staff Types	Configure agents into staff types
Shifts	Define the properties for scheduling, including weekly constraints, daily constraints, and agent activities.
Shift Rotations	Assign agents to a rotation definition so that the agents can start on different weeks with different shift start times.
Agent Details	View a list of agent information
Shift Tracking	Define the settings for agent-initiated trading of schedules or partial schedules
Operating limits	View operating limits for a scheduling unit.

Working with Scheduling Units

Scheduling units provide the basis for the entire schedule creation process. Scheduling units partition workgroups, interactions, and users into logical groups that Interaction Optimizer schedules together. Scheduling units enable you to create, manage and view forecasts, schedules and adherence events for a group of workgroups as a single unit.

When you create scheduling units from the [Interaction Optimizer Home page](#), specify a name for the scheduling unit and, on the Scheduling Unit page, configure the scheduling unit.

Note: To generate a schedule for a scheduling unit, assign at least one workgroup to the scheduling unit, and either assign users as resources to a shift definition or in an agent group that receives a schedule through a schedule bid.

A scheduling unit encompasses a single contact center or site. It is not a method of partitioning workgroups within a contact center. Interaction Optimizer produces forecasts and schedules for more than one distinct contact center. A distinct contact center does not share resource and does not process the same set of interactions. If your company has two or more distinct contact centers, you can create separate scheduling units for each separate contact center. Agents who handle the same set of interactions should be in the same scheduling unit. If you installed Interaction Multi-Site to link two or more IC contact centers, use separate scheduling units to create forecasts and schedules for each contact center/site.

Note: See *CIC Multi-Site Technical Reference* in the Technical Reference Documents section in the PureConnect Documentation Library.

An agent can be a member of more than one workgroup. If all workgroups to which the agent belongs exist in the same scheduling unit, Interaction Optimizer schedules the agent according to the rules in the scheduling unit's weekly shift definition parameters or the daily and weekly agent constraints. An agent can only be assigned to one weekly shift definition at a time. When the agent's workgroup assignments cross scheduling units, Interaction Optimizer schedules the agent in the scheduling unit that contains the weekly shift definition to which the agent has been assigned.

For more information on configuring a scheduling unit, see the **Related Topics**.

Create a new scheduling unit

Within a scheduling unit, you can partition workgroups, interactions, and users into logical groups that Interaction Optimizer schedules together. Scheduling units enable you to create, manage and view forecasts, schedules and adherence events for a group of workgroups as a single unit.

1. From the **Interaction Optimizer Home** page, next to the **Scheduling unit** drop-down list click the [add](#) button. The **Scheduling Unit** dialog box opens.
2. In the **Enter Name** field, type a distinct name for the scheduling unit and click **OK**. The **Scheduling Unit** page opens.

Note: A scheduling unit name cannot contain any of the following characters: /, \, |, &, ', ^, =, +.

3. Click the arrow at the end of the Start day of week drop-down list and select the day of week this scheduling unit begins.
4. Click the arrow at the end of the Time Zone drop-down list and select this scheduling unit's time zone.

Note: The default time zone is the current location's time zone. You must have appropriate rights to modify a time zone.

5. On the **Scheduling Unit** page, [configure the scheduling unit parameters](#) and click [save](#).

Note: After you create a scheduling unit, view [operating limits](#) for the new scheduling unit to determine if scheduling unit is within operating limits.

For more information on configuring scheduling unit parameters, see the **Related Topics**.

Configure Scheduling Unit parameters

When you create a scheduling unit, customize the following criteria based on your company goals and requirements:

1. [Create service goal groups](#) to define common service goals, associate the goals to specific workgroups, and link the group to a specified scheduling unit.
2. [Create schedule and forecast names and configure date format](#) to specify a default name for new forecasts and schedules.
3. [Configure how many weeks of data to use in the forecast](#) to determine the amount of ACD data to include in the forecast. Select a number of weeks from which retrieve data, omitting excluded days. Select a number of occurrences to retrieve data for the number of instances, regardless of the number of weeks.
4. [Set Agent schedule preference versus coverage focus](#) to select the level to which an agent schedule preference impacts schedules, set agent deferred work threshold to prevent occupancy from becoming too high, manage shrinkage, and enable or disable activity bidding.
5. [Select adherence exception settings and conformance calculations](#).

Note: After you create a scheduling unit, view [operating limits](#) for the new scheduling unit to determine if scheduling unit is within operating limits.

For more information on configuring specific parameters for the scheduling unit, see the [Related Topics](#).

About service goal groups

Service goal groups help define common service level objectives, associate these objectives to specific workgroups, and link the service goal group to the selected scheduling unit.

To create, configure, and manage service goal groups, from the [Interaction Optimizer Home page](#), in the **Configuration** area click **Scheduling Unit**. In the Service Goal Groups area of the **Scheduling Unit** tab, you can:

- [Create a service goal group](#)
- [Configure a service goal group](#)
- [Configure a workgroup within a service goal group](#)
- [Move a workgroup to another service goal group](#)
- [Edit a workgroup's interaction types within a service goal group](#)

Create a service goal group

Create a service goal group to define common service level objectives, associate these objectives to specific workgroups, and link the service goal group to the selected scheduling unit.

1. From the [Interaction Optimizer Home page](#), in the **Configuration** area click **Scheduling Unit**.
2. In the **Service Goal Groups** area, click the [add](#) button. The **Service Goal Group** dialog box opens.
3. Next, configure the service goal groups. For more information, see the **Related Topics**.

Configure a service goal group

After you create a service goal group, in the Service Goal Group dialog box you can define common service goals and associate these goals to specific workgroups and interaction types:

Name

Enter a unique name for the service goal.

Service Level

Select this check box to factor service level into the headcount forecast. If enabled, the headcount forecast calculates the number of agents required to handle the predicted interaction volume. By default, service level is enabled.

Percent Answered

If you choose Service Level, use the up and down arrows to set the desired percentage of interactions answered within the time period. The default value is 80%, and acceptable values are 0 to 100.

Within Time Period (seconds)

If you choose Service Level, use the up and down arrows to set the number of seconds for the desired time period for the percent answered interactions. The default value is 20 seconds, and the acceptable values are 0 to 999.

The headcount forecast uses Percent Answered and Within Time Period settings to determine the number of agents needed to reach the desired service level.

Average Speed of Answer

Use the up and down arrow to set the desired Average Speed of Answer in seconds. In the headcount forecast, this setting determines the number of agents needed to reach the desired service level. Use this setting with Percent Answered and Within Time Period settings for additional goals. For example, set a certain service level (i.e., 80% of calls answered in 20 seconds) with an Average Speed of Answer of 15 seconds.

The default value is 30 seconds. Acceptable values are between 1 and 999,999.

Workgroups area

Note: To add or move workgroups within a service goal group, you must have view and modify control rights for Scheduling Unit Configuration. If you have questions about your rights, see your administrator.

In the Workgroups area, you can:

- Click the [Add workgroup](#) button to configure the workgroups for which this service goal applies.
- Click the [Move to another service goal group](#) button to move a workgroup to another service goal.
- Click the [Remove workgroup](#) button to remove the workgroup from the service goal.

For more information about configuring service goal groups, see the [Related Topics](#).

Configure a workgroup within a service goal group

Add or move a workgroup to a service goal group and specify the interaction types to which the service goal applies to that workgroup. Each workgroup may have a different set of interaction types that belong to the same service goal group. For example, Workgroup1 may have calls, chats, and instant questions while Workgroup2 only has calls. Also, the same workgroup may belong to multiple service goal groups as long as the Workgroup | Interaction Type is different. For example, you might have Workgroup1 | Calls in SGG1 and Workgroup2 | Emails in SGG2. Use the filters at the top of the Workgroups area to narrow the list of workgroups, scheduling units, or service goal groups to display.

Note: To add or move workgroups within a service goal group, you must have view and modify access control rights for scheduling units. If you have any questions about your rights, see your administrator.

1. From the [Interaction Optimizer Home page](#), in the **Configuration** area click **Scheduling Unit**.
2. In the Service Goal Groups area, do one of the following:
 - To add a new service goal group and select workgroups to assign this goal, click the [Add](#) button.
 - To edit or modify a service goal group and its workgroups, click the [Edit](#) button.

The **Service Goal Group** dialog box opens.

3. In the **Workgroups** area, to add a workgroup to an existing service goal group, click the [Add](#) button. The **Add Workgroup** dialog box opens.
4. In the **Workgroups Name** column, select the workgroup you want to add.
5. Click the arrow at the end of the **Interaction Types** drop-down list and select the check boxes next to the types of interactions to include.

Note: Clearing an interaction type check box will not remove it from the workgroup. Currently, to remove an interaction type from a workgroup, you must delete the workgroup and then add it back to the service goal group with the desired interaction types.

6. Click **OK**.

For more information about configuring service goal groups, see the **Related Topics**.

Move a workgroup to another service goal group

Create a service goal group to define common service level objectives, associate these objectives to specific workgroups, and link the service goal group to the selected scheduling unit.

Note: To add or move workgroups within a service goal group, you must have view and modify access control rights for scheduling units. If you have any questions about your rights, see your administrator.

1. From the [Interaction Optimizer Home page](#), in the **Configuration** area click **Scheduling Unit**.
2. In the **Service Goal Groups** area, select a service goal group and click the [move](#) button. The **Service Goal Group** dialog box opens.
3. In the **Workgroups** area, select the workgroup to move and click the [Move to another service goal group](#) button. The **Move Service Goal Groups** dialog box opens.
4. To move the workgroup to a new service goal:
 - a. In the **Name** field type a unique name for the service goal group and click **OK**. The workgroup disappears from the current service goal group.
 - b. Click **OK**. The new service goal group and its associated workgroup appears in the **Service Goal Groups** list.
5. To move the workgroup to an existing service goal:
 - a. Clear the **Move to new service goal group** check box.
 - b. Select the scheduling unit and service goal to move to the workgroup and click **OK**. The workgroup disappears from the current service goal group.
 - c. Click **OK**. The workgroup appears in the existing service goal group row.
6. Click the [save](#) button.

For more information about configuring service goal groups, see the **Related Topics**.

Edit a workgroup's interaction type within a service goal group

You can add or remove the interaction types assigned to any workgroup associated with a particular service goal group.

Note: To add or move workgroups within a service goal group, you must have view and modify access control rights for scheduling units. If you have any questions about your rights, see your administrator.

1. From the [Interaction Optimizer Home page](#), in the **Configuration** area click **Scheduling Unit**.
2. In the Service Goal Groups area, select a service goal group and click the [edit](#) button. The **Service Goal Group** dialog box opens.
3. In the Workgroups area, select the workgroup to move and click the **Edit Workgroup** button. The Edit Workgroup dialog box opens.
4. Click the arrow at the end of the Interaction types drop-down list and do one of the following:
 - a. To add interaction types to the workgroup, select the appropriate interaction check box or check boxes.
 - b. To remove interaction types, clear the appropriate interaction check boxes.
5. Click **OK** to return to the Service Goal Group dialog box.
6. Click **OK** to return to the Scheduling Unit tab.
7. Click the [save](#) button.

For more information about configuring service goal groups, see the **Related Topics**.

Create schedule and forecast names and configure date settings

In the **Naming Conventions** area of the **Scheduling Unit** page, create default name formats for the scheduling unit's forecasts and schedules and determine the date pattern used when Interaction Optimizer displays the schedule or forecast.

Note: The ^ symbol in the **Forecast** and **Schedule** fields acts as a placeholder for the date pattern you choose in the **Date pattern** drop-down list. Move this character wherever you want the date to appear in the forecast or schedule name.

1. Set up naming conventions for forecasts:
 - In the **Forecast** field, type a unique name for the forecast.
 - Move the ^ character to the location where you want the date format to appear.
2. Set up naming conventions for schedules:
 - In the **Schedule** field, type a unique name for the forecast.
 - Move the ^ character to the location where you want the date format to appear.
3. Click the arrow at the end of the **Date format** drop-down list and select the date format for Interaction Optimizer to use when it displays the schedule or forecast.
4. Click [Save](#).

For more information about specifying forecast data, see the **Related Topics**.

Configure how many weeks of data to use in the forecast

Note: [AI-powered forecasting](#) can consume up to three years of historical data. The ability to configure the data to use for a forecast does not apply to AI-powered forecasts.

In the Forecasting area of the Scheduling Unit page, select the amount of ACD data to include in the forecast. Select the number of days of data to use when creating a new forecast. Choose from a number of weeks or a number of occurrences.

If you choose a particular number of weeks, Interaction Optimizer creates forecasts based on the number of specified weeks excluding any days marked with an “Exclude from Forecast” day classification. If you choose 6 weeks of past data, Interaction Optimizer may use less than 6 data points to average.

For example, let’s assume you want to determine the days to use for Monday’s forecast, and you select to forecast from the last 6 weeks. However, 2 of the Mondays within the last 6 weeks were assigned an “Exclude from Forecast” day classification. Therefore, Interaction Optimizer only uses the remaining 4 Mondays in the forecast.

If you choose a particular number of occurrences, Interaction Optimizer uses a fixed number of data points for each day of the week in the forecast, regardless of how many weeks old the data might be.

Using the example scenario above, if you set the number of occurrences to 6 then Interaction Optimizer ignores the 2 days assigned with the “Exclude from Forecast” day classification and instead uses data from the last 8 weeks (assuming the remaining Mondays do not contain exclusionary day classifications), and creates a forecast with 6 days of usable data points.

1. In the **Forecasting** area, do one of the following:

- Click the **Number of weeks** radio button and use the up and down arrows to select the number of weeks to use in the forecast.

Note: If any days include the “Exclude from Forecast” day classification, the number of actual weeks in the forecast may be lower.

- Click the **Number of occurrences** radio button and use the up and down arrows to select the number of weeks to use in the forecast.

Note: If any days include the “Exclude from Forecast” day classification, the exact number selected will be used in the forecast but the data may be older than the specified number.

2. Click [save](#).

3. Next, [set agent schedule preference versus coverage focus](#). For more information about configuring agent schedule preferences against schedules and managing shrinkage, see the **Related Topics**.

Set agent schedule impact, deferred work threshold, unstaffed shrinkage, and activity bidding preferences

In the **Scheduling** area of the **Scheduling unit** page, select the level to which agent schedule preferences impact schedules, set agent deferred work threshold to prevent occupancy from becoming too high, manage unplanned staff shrinkage, and select or disable activity bidding.

Note:

Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling](#) unit drop-down list.

The scheduling engine generates all possible schedules with the following steps:

1. Score each schedule per agent in terms of preferences
2. Rank schedules per each agent in order of meeting agent preferences

If the **Agent schedule preference versus coverage focus** setting is "1", the system does its best to honor agent's preferences even when the forecast shows more need at different times of the day.

If the **Agent schedule preference versus coverage focus** setting is "100", the system does its best to meet the forecast need even when the times might be different from what the agent prefers.

Note:

Interaction Optimizer contains a dynamic scheduling engine that considers agent preferences more accurately. Best practice recommends you evaluate pre-SU5 settings and adjust them accordingly.

Set the Agent schedule preference versus coverage setting

1. In the **Agent schedule preference versus coverage focus** area, do one of the following:
 - Click and drag the pointer on the slider bar to change the setting between **Preference** and **Coverage**.
 - Use the up or down arrows to adjust the setting.

Note:

A setting or value closer to "1" mainly ignores coverage and focuses on agent preference. A setting or value closer to "100" mainly ignores agent preference and focuses on coverage. The default setting of "50" focuses equally on agent preference and coverage.

2. In the **Maximum occupancy for deferred work** area, use the up and down arrows to select the maximum amount of time that can be filled for agents if they are able to handle both calls and deferred work.

Note:

For example, if the service level is set so that agents will likely handle calls for 85% of their time and the maximum occupancy is set to 95%, then the scheduling engine adds enough deferred work to require up to 10% of the agents' time. If agents only take calls, this setting is ignored. This feature allows agents configured to receive multiple interactions the ability to receive supplemental work while waiting for calls to arrive.

3. Click the [Manage shrinkage button](#) to set the shrinkage per interval for the entire week.
4. To allow agents to bid on schedules that include the exact times for all the activities of the day, select the **Enable activity bidding check box**.

Note:

Because this option removes the flexibility for the scheduling engine to optimize activities such as breaks and lunches for future schedules, best practice recommends only selecting it to increase agent satisfaction.

5. To prevent the system from adjusting schedule forecast and scheduled requirements by looking at past service performance compared with predicted performance, un-check the **Use calibration** check box.
6. Click [Save](#) on the Interaction Optimizer toolbar to save your changes.

Related topics

[Configure unplanned shrinkage](#)

[Configure weeks of data to use in forecast](#)

[Create schedule and forecast names](#)

[Scheduling Overview](#)

[Working with Scheduling Units](#)

About schedule calibration

Note: Schedule calibration does not apply to [AI-powered schedules](#).

Calibration attempts to adjust forecast and scheduled requirements by looking at past service performance compared with predicted service performance.

If calibration is enabled, then scheduling and re-forecasting will look at published schedules or actual agent activity information in the recent past along with historic service performance and adjust requirements accordingly.

Calibration first looks to see if there is enough published schedules and if not it will then look to see if there is enough actual agent activity information. If either of those cases is true, it then runs simulations using that information along with historic volume and handle time coming up with predicted service performance. That service performance is then compared to historic service performance.

If historically higher service performance has been attained compared to predicted service performance, then future requirements are adjusted downward. Conversely, if historically lower service performance has been attained compared to predicted service performance, then future requirements are adjusted upward.

Things that can attribute to lower or higher service performance compared to predicted service performance include: agent shrinkage, adherence, and conformance, non-scheduling unit resources handling scheduling unit interactions, scheduling unit resources handling interactions outside of the scheduling unit, forecast accuracy, and other operational behaviors, both good and bad.

Configure unplanned shrinkage

Shrinkage occurs when you assign agents to a shift but for various reasons some scheduled agents are unavailable to take interactions. Shrinkage occurs due to many factors:

- Breaks
- Meals
- Unscheduled absences*
- Vacations
- Training
- Coaching
- Holidays
- Non-Adherence*
- Meetings

Note: Interaction Optimizer takes into account any activity assigned to the Daily Shift Constraint, so it is not necessary to account for these when calculating a shrinkage factor. Use only unscheduled non-adherence events when calculating shrinkage for Interaction Optimizer.

Use the **Configure Unplanned Shrinkage** dialog box to set shrinkage per interval for the entire week. The data may indicate more or less shrinkage at a given interval. For example, you may set higher shrinkage values on Monday mornings than you would on Tuesday afternoons, because people may be more likely to call in sick or arrive late to work on Monday mornings.

Example:

The following example outlines how, when you schedule more agents, the shrinkage indicates how many agents you expect to be available during each interval of the day:

Expected agents = (scheduled agents - (scheduled agents * shrinkage/100)). So, 200 scheduled agents and 10% shrinkage would be $(200 - (200 * 10\%)) = 180$ expected agents

Configure unplanned shrinkage

1. From the **Scheduling Unit** tab, click **Configure Shrinkage**. The **Configure Unplanned Shrinkage** dialog box opens.
2. In the **Default unplanned shrinkage** field, type a default shrinkage value for Interaction Optimizer to use for all intervals across all the days and click **Apply**.
3. To quickly change a group of cells in the grid at the same time, click and drag your mouse to highlight specific times and/or dates cells and in the **Set selected values to** field, type the desired shrinkage value to assign to the selected cells. Next, click **Apply**. For example, you may want a shrinkage value of 15% from 7:00 a.m. to 9:00 a.m. on Monday through Friday. You can also use **Ctrl+click** to highlight non-consecutive times and/or dates.
4. To increase or decrease a shrinkage value for a selected group of cells by a certain percentage:

- Highlight the particular group of cells for which you want to change the shrinkage.
- In the **Change selected values by** field, type the percentage by which to increase or decrease shrinkage.
- Click **Apply**.

Note: The value you enter in this field increases or decreases the existing shrinkage value by the number you enter. It does not set the shrinkage to entered percentage, but For example, assume you have a default value of 10% shrinkage for all intervals, but you want to increase all Monday intervals by 20%. If you select all the intervals on Monday, enter 20 in the Change selected values by field, and click Apply, all Monday intervals will increase to 12% instead of 10%.

5. To return the selected values to the default percentages, click the **Set selected values to default** button.
6. To return all values to the default settings, click the **Set all to default** button.

Select adherence exceptions settings and conformance calculations

In the Adherence Exceptions area of the Scheduling Unit page, configure adherence exception settings and determine non-conformance activity.

When you select to treat all activities other than ACD as being equivalent, if an agent performs an unscheduled, non-ACD activity (meeting, break, vacation, etc.), but is scheduled for a different, non-ACD activity, he or she will be considered "in adherence", even though the non-ACD activities differ. For example, if the agent is scheduled to be in a meeting but his or her status is set to "lunch", the agent is still considered to be in adherence.

Note: When an agent changes his or her status to an activity type, the change is not reflected in the current adherence calculations. Interaction Optimizer Server receives the change and processes RTA updates for the next statistics update.

Set up adherence exceptions

1. In the **Number of minutes to automatically excuse** area, use the up and down arrows to specify how many minutes to excuse before the agent is out of adherence.
2. To direct Interaction Optimizer to consider all activities excluding ACD equally for adherence purposes, select the **Treat all activities other than ACD as being equivalent** check box.
3. In the **Conformance should include** area, select from Only paid activities, or choose the activities you want to include.

For more information about configuring specific parameters for the scheduling unit, see the **Related Topics**.

Agent Groups

An agent group is a group of peer agents who handle the same types of interactions, belong to the same workgroups, and have the same skill set.

Note: It is important to include only similar agents in the same agent group. If agents in the same workgroup have different skill sets and/or cannot handle the same interaction types are put together in the same agent group, then the top-ranked agents in that agent group might not have their preferences considered as highly as the lower-ranked agents if the lower-ranked agents cannot handle the scheduled need as well.

Interaction Optimizer can rank agents in a group against each other for schedule bidding and agent preferences. The agent ranking feature considers a variety of [criteria](#) to determine which agent receives a better choice for schedule bidding or for a weekly schedule based on preferences. This section includes:

- [Add Agent Group](#)
- [View and Filter Agent Groups](#)
- [View Agent Rankings](#)
- [Agent Data](#)

Add Agent Group

Add agent groups and set the criteria and data types to consider when ranking.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

1. From the **Interaction Optimizer Home** page, in the **Configuration** area click **Agent Groups**. The [Agent Groups](#) tab opens. The existing agent groups appear in the top of the view.
2. **Optional:** To add more columns or change the columns to display:
 - a. Right-click in the grid that displays the agent groups and select **Choose Columns**. The **Column Selector** dialog box opens.
 - b. Select the check boxes next to the columns you want to display.
 - c. Click **X** to apply the changes and return to the Agent Groups tab.
3. Click [add](#), or right-click in the grid that displays the agent groups and select **Add** from the menu that appears.
4. On the **Agent Group** tab (located in the bottom half of the workspace), in the **Name** field enter a meaningful and unique alphanumeric name for the new agent group.
5. Use the up and down arrow keys to set the **Group Rank**.

Note: The group rank is used only when two agents from *different* agent groups can meet the same need in the same interval. The group rank determines which agent group has precedence over the other agent groups.

6. Set the default [criterion definitions](#) and/or add new definitions:

Note: The **Total Percentage** of all criteria must equal 100 percent.

- From the **Data Type** drop-down list, select "Date", "Numeric" or "Random".
 - Select the **Ascending** check box to order this criterion in rising value, or leave unchecked to order in descending value.
 - Use the up and down arrows to set the **Percentage** weight.
7. To optionally delete a criterion, select the criterion to remove and click the **Delete** button.
 8. Click [save](#) to store the agent group settings.

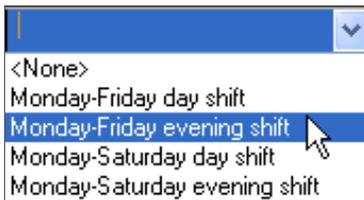
View and Filter Agents in the Agent Groups

On the Agent Groups tab, view agents in the agent groups and the associated information on the Agents tab, and optionally filter the view. Also, change the agent's or agents' group membership, add agent groups, and set the [criteria](#) to consider when ranking.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

Filter the agents

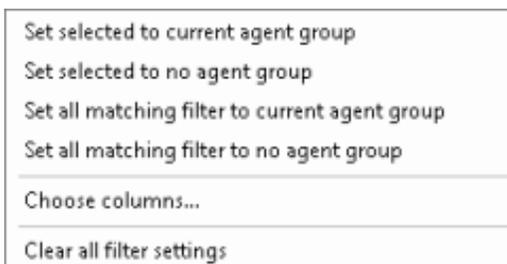
1. From the Interaction Optimizer Home page, in the Configuration area click Agent Groups. The [Agent Groups](#) tab opens.
2. Select the agent group to which you want to add agents.
3. In the bottom of the workspace, click the Agents tab.
4. Click the column heading you want to filter. The columns available to view and filter are:
 - Agent
 - Agent Group
 - Workgroups
 - Interaction Types
 - Licensed
 - Scheduling Unit
 - Shift
 - Shift Rotation
 - Skills
5. In the blank row below the column heading, type the filter information by which to sort, or click the down arrow and select the filter information from the drop-down list.



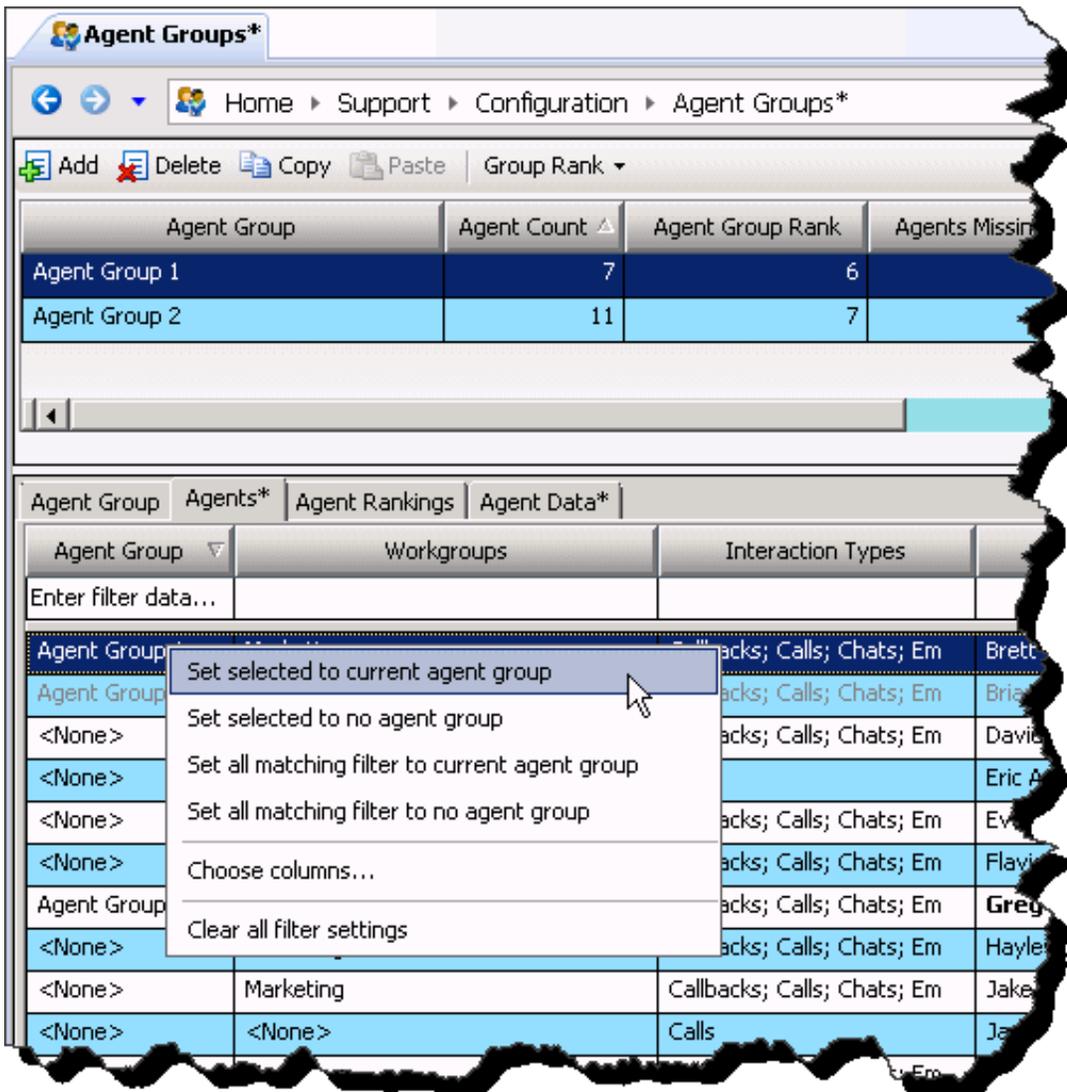
Change group membership

Note: Administrators must have the appropriate right to access another scheduling unit to which the agent is assigned before the administrator can move the agent from the existing scheduling unit and into the agent group he or she is editing.

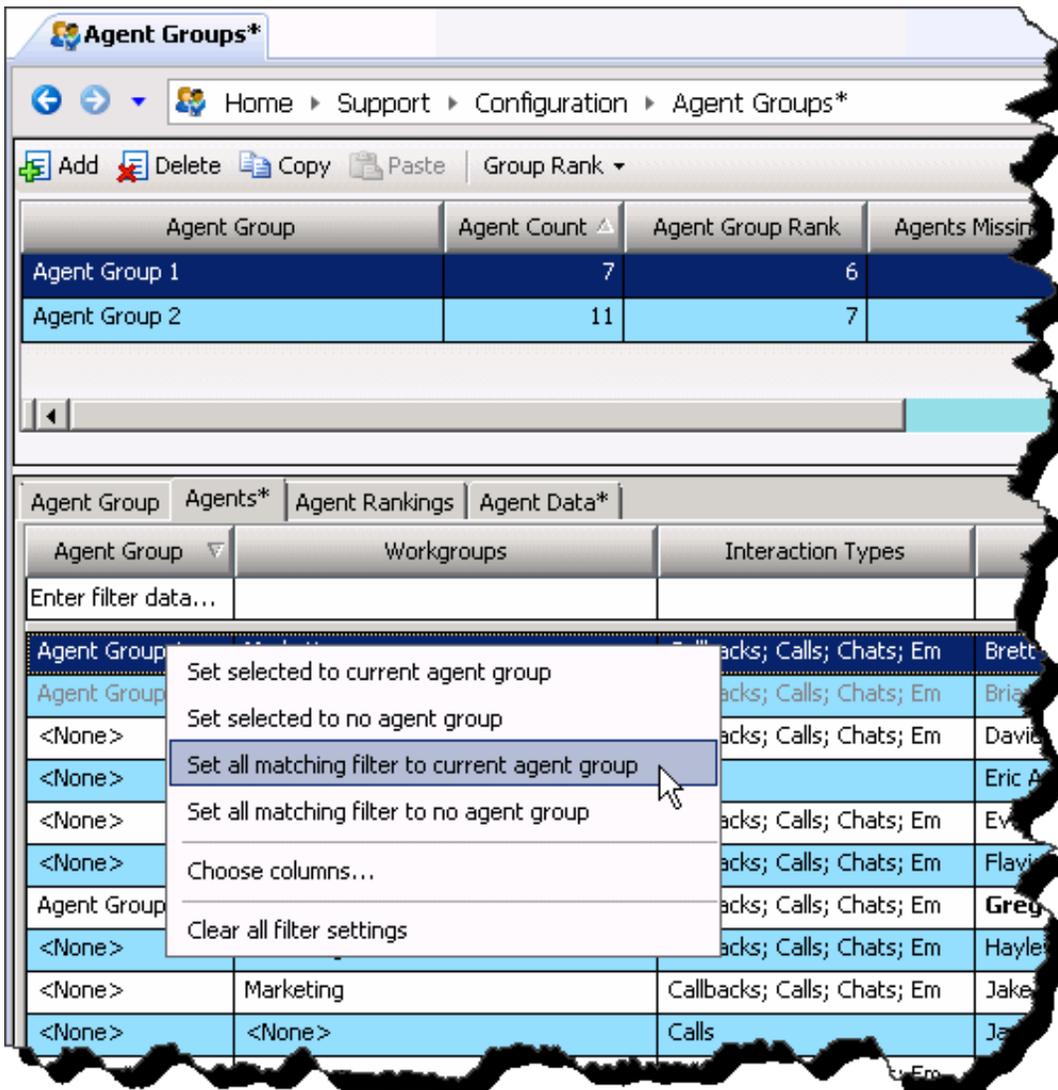
1. Select one agent, or select multiple agents by using your mouse click and the <CTRL> or <SHIFT> key, then right-click to display the context menu.



2. Do any of the following:
 - Use the **Set selected to current agent group** option (available when multiple cells are selected) to add all selected agents to the agent group highlighted above the grid, "Agent Group 1" in the example shown below:



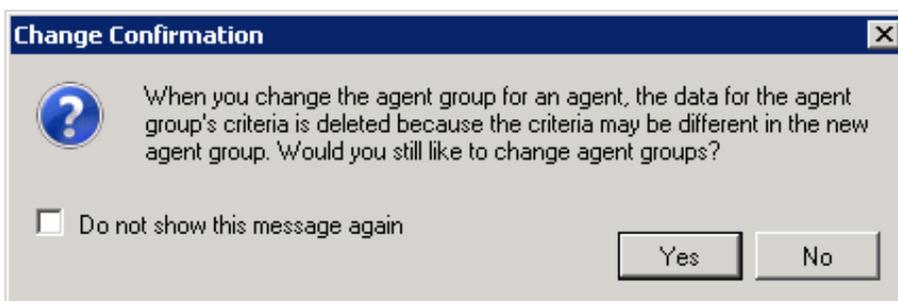
- Use the **Set selected to no agent group** option (available when multiple cells are selected) to remove group membership for the selected agents.
- Use **Set all matching filter to current agent group** to change group membership to the currently highlighted agent group for every agent in the agent view. All the agents that have not been filtered by the current filter settings, are changed to the highlighted agent group. The highlighted agent group is "Agent Group 1" in the example shown below:



This is useful for example, when you want to move agents with specific skills and workgroup membership (find the skills and workgroups by filtering) to another agent group.

- Use **Set all matching filter to no agent group** to remove group membership for every agent that is not filtered by the current filter settings.
- Select **Choose columns...** to open the **Column Selector** dialog and add or remove the columns displayed in the agent view.

When you make an agent group membership change, you are asked to confirm your change. Click **Yes** to save the changes, or click **No** to cancel.



Note: When multiple users change agent groups simultaneously, Interaction Optimizer may not immediately display the updated mapping of an agent group ID to the correct agent group name. In this situation, the agent group's ID appears in the Agent Group column of the Agents tab. To refresh and view the updated information, close the view and then reopen it.

View Agent Rankings

From the Agent Rankings tab, view and sort agents and agent rankings, and go directly to a specific agent's data. The columns include Overall Rank and any other columns which are created automatically based on defined criteria. For example, if you have criteria called "Performance" and "Hire Date", then you will see the following columns; Overall Rank, Performance Rank, and Hire Date Rank.

The rank values shown in the agent rankings are based on the random numbers created for each agent. The order for random ranking is based on whether the "Ascending" checkbox on the "Agent Group" tab is checked or not. If it is checked, then the agent with the lowest random number will get a rank of "1", the agent with the next lowest random number will be ranked "2", and so forth. If the "Ascending" checkbox is unchecked, then the agent with the highest random number will be ranked "1", and so forth.

Randomization ensures that the most senior agents' preferences do not always 'out rank' more junior agents' preferences.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page](#) Scheduling unit drop-down list.

View and sort agent rankings

1. From the [Interaction Optimizer Home page](#), in the **Configuration** area click **Agent Groups**. The [Agent Groups](#) tab opens.
2. In the top grid, select the agent group who's agent rankings you want to view.
3. In the bottom of the workspace, click the **Agents Rankings** tab.
4. Click one of the column headings in the **Agent Rankings** tab. An 'up' arrow indicates the column is sorted in ascending order, and a 'down' arrow indicates descending order.
5. Optionally enable the following settings:
 - **Automatically rank on save:** When this option is checked, all agents in this agent group will be ranked based on the latest data entered in the [Agent Data](#) tab. This eliminates the need to manually click the Rank agents now button frequently. However, you may not want the Overall Rank to change frequently. For example, you may want to rank agents once, make sure they have the same rank for several months while the agents are bidding on shifts, and then re-rank the agents. Even if the data changes during those months, you may want the rank to stay constant so it is easier to determine why an agent's preference won or lost.
 - **Generate random number each ranking (only for random criteria):** When this option is checked, each random field will have a new random value assigned each time the agent rankings are calculated. When unchecked, the initial random numbers assigned to each random field for will stay the same. You may want to leave this unchecked when you want the overall rank to stay the same for a longer period of time (see example above).
6. To view or edit criteria for a specific agent, double-click the agent row. The [Agent Data](#) tab opens.

View or Edit Agent Data

On the Agent Data tab, view the [criteria](#) associated with each agent group and the specific criterion values set for the currently selected agent, and edit the selected agent's criteria values.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

View or edit agent data

1. From the **Interaction Optimizer Home** page, in the **Configuration** area click **Agent Groups**. The [Agent Groups](#) tab opens.
2. In the top grid, select the agent group that contains the agent data you want to edit.
3. In the bottom of the workspace, click the **Agent Data** tab.
4. Select the agent from the drop-down list. The agents listed are members of the associated agent group as selected in agent group list above.
5. Optionally edit the values for the criteria for the agent:
 - For **Date** criteria, from the calendar control select the value on the calendar dialog, type it into the field, or click the up and down arrows.
 - For **Numeric** criteria, type a number into the text area. Any field with Random type criteria is read-only and cannot be edited. The changes made here apply to the selected agent only.

About staff types

A staff type represents a group of agents that belong to the same workgroups, handle similar interaction types, and have similar skills. Grouping agents with similar workgroups, interaction types, and skills in staff types ensure all agents in one type or category are not granted time off on the same day.

Staff types contain coverage groups. Organize coverage groups so that the agents that work similar hours are grouped together.

For more information on staff types, see the **Related Topics**.

Create a staff type

Create staff types to group together agents with the same workgroups, interaction types, and skills. This grouping prevents time off from being granted to all agents of a particular type on the same day.. Staff types must create at least one coverage group.

1. From the **Interaction Optimizer Home** page, in the **Configuration** area click **Staff Types**. The Staff Types tab opens.
2. Click the [add](#) button. The Staff Type dialog box opens.
3. In the Name field, add a descriptive name for the staff type. For example, "Spanish language" or "Level 1 Support".
4. Add a coverage group to organize agents who work similar hours within the staff type:
 - a. In the Coverage Groups area, click the [add](#) button.
 - b. In the Name field, add a descriptive name for the coverage group. For example, "Day shift" or "Weekend".
5. Next, [add agents to a coverage group](#). For more information on staff types, see the **Related Topics**.

Add agents to a staff type coverage group

Add agents to a coverage group within a staff type to ensure time off isn't granted to all agents in one type or category on the same day.

1. If you have not already done so, [create a staff type with at least one coverage group](#).
2. In the Staff Type dialog, in the Coverage Groups area select the coverage group to which you want to add similar agents.
3. In the agent grid below the Coverage Groups grid, click the [add](#) button. The Add Agents dialog opens.
4. Click the agents you want to add to the coverage group and click **OK**. The selected agents appear in the agent grid.
5. Click **OK** to return to the Staff Types tab.

For more information on staff types, see the **Related Topics**.

Working with Shifts

You can create and configure shifts to use when creating and maintaining schedules. This chapter provides instructions on how to:

- [Create a new shift](#)
- [Configure weekly restraints for a shift](#)
- [Configure daily restraints for a shift](#)
- [Configure shift activities](#)
- [Configure agent assignments](#)
- [Delete a shift](#)
- [Copy and paste a shift](#)

Configure Shifts

You can create and configure shifts to use when creating and maintaining schedules. This topic provides instructions on how to:

- [Create a new shift](#)
- [Configure weekly restraints for a shift](#)
- [Configure daily restraints for a shift](#)
- [Configure shift activities](#)
- [Configure agent assignments](#)
- [Delete a shift](#)
- [Copy and paste a shift](#)

Note: Before you configure shifts, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

Create a new shift

1. From the **Interaction Optimizer Home** page, in the Configuration area click **Shifts**. The **Shifts** tab opens.
2. In the top section of the view, click [Add](#).
3. On the **Configuration** tab, enter the following:
 - a. **Shift name:** The name that identifies the shift.
 - b. **Enable schedule bidding:** Select this check box to enable schedule bidding for this shift.

Configure weekly constraints for a shift

1. Click the **Weekly Constraints** tab. The **Weekly Constraints** tab opens.
2. Enter the following constraints:
 - **Minimum paid time (hours):** The minimum amount of paid time allowed for the shift for the week.
 - **Desired maximum paid time (hours):** The desired maximum amount of paid time allowed for the shift for the week.
 - **Absolute maximum paid time (hours):** The absolute maximum amount of paid time allowed for the shift for the week.
 - **Minimum time between shifts (hours):** The minimum amount of time allowed between shifts.
 - **Maximum days:** The maximum number of days allowed for the shift for the week.

Note: Enter a fraction of an hour in one of the time boxes to indicate the number of minutes. For example, .25 equals 15 minutes, .50 equals 30 minutes, and .75 equals 45 minutes.

Configure daily constraints for a shift

1. Click the **Daily Constraints** tab. The **Daily Constraints** tab opens:
2. To add a daily constraint, do the following:

- Click [Add](#).
- Enter the following information:

Name	The name of the constraint.
Earliest shift start time	The earliest time a shift can start.
Latest shift start time	The latest time a shift can start.
Shift start time increment	The amount of time to add to one shift start time to get the next possible shift start time. For example, if you have a earliest shift start time of 8:00am, a latest shift start time of 10:00am, and a shift start time increment of 15 minutes, your possible start times for the shift are: 8:00, 8:15, 8:30, 8:45, 9:00, 9:15, 9:30, 9:45, and 10:00.
Maximum shift start time variance	The amount of time a shift start time can vary over the entire week for one particular agent. For example, if the variance is set to 1 hour and Amy's schedule starts at 8:00 a.m. on one day and 9:00 a.m. on another day, all Amy's schedules for the week must start between 8:00 a.m. and 9:00 a.m. Note: This constraint is ignored if it prevents schedules from being generated.
Latest shift stop time	The latest time a shift can end.
Minimum paid time	The minimum amount of paid time allowed for the shift for the day.
Maximum paid time	The maximum amount of paid time allowed for the shift for the day.
Minimum contiguous work time	The minimum amount of time the agent must work before starting a non-contiguous activity or ending his or her shift.
Maximum contiguous work time	The maximum amount of time the agent can work before starting a non-contiguous activity or ending his or her shift.
Active days	Select the days the daily constraint is active. Days can be required, optional, or excluded. To make a day required, click the check box until a check mark appears. To make a day optional, click the check box until it's filled with blue. To exclude a day, click the check box until it's cleared. Note: You cannot save a shift unless you configure daily constraints.

To delete a daily constraint, click the constraint to delete, click [Delete](#), and then in the **Confirm Delete** dialog , click **Yes**.

To copy and paste a daily constraint, click the constraint to copy, click [Copy](#) and then click [Paste](#). The daily constraint is copied and pasted in the top section of the Daily Constraints tab.

Configure shift activities

Click the **Activities** tab. The **Activities** tab appears.

Tip: You can show or hide the columns on the Activities tab by right-clicking in the view and clicking **Choose columns...**

To add an activity for a daily constraint, do the following:

- Click **Add**. The **Add New Activity** dialog box appears.
- Enter the following information:

Activity type	The type of shift activity.
Length	The length of time the activity lasts.
Attendance requirement type	<p>Valid values are:</p> <p>Unspecified (default setting): Selecting this option discards schedules that have shift activities that have been skipped (for example, all remaining activities to be scheduled do not have a start time greater than or equal to the current time), suppresses schedules that end in shift activities that are both non-paid and non-contiguous, and suppresses schedules that have unscheduled shift activities that are both paid and contiguous.</p> <ul style="list-style-type: none"> • Do Not Schedule: Selecting this option causes the scheduling engine to ignore this shift activity. • Optional: Selecting this option causes the scheduling engine to keep schedules meeting minimum constraints and having optional, unscheduled shift activities. • Required: Selecting this option causes the scheduling engine to discard potential schedules that do not contain the scheduled shift activity. <p>Note: If required activities occur during a paid time off request, the required activities are ignored and a schedule containing the time off request is created.</p>
Actual or relative time	<p>Valid values are:</p> <ul style="list-style-type: none"> • Relative to shift start (default setting): Select this option to use times relative to start times. For example, if this activity is assigned to different shifts, the relative time should be used (i.e., 2:00 hours from shift start) rather than absolute time (i.e., 10:00 AM), so that the settings are valid for all the shifts. • Actual time: Select this option to use absolute start times.
Earliest start time from shift start	Type in the box or use the up and down arrows to set the earliest time this activity can start. The default value for this field is 8:00 AM. If Relative to shift start is selected in the Actual or relative time list box, this time is the earliest start time, relative to the shift start time, the activity can start. If you selected Actual time from the Actual or relative time list box, this time is the absolute earliest start time the activity can start.
Latest start time from shift start	Type in the box or use the up and down arrows to set the latest time this activity can start. If Relative to shift start is selected in the Actual or relative time list box, this time is the latest start time, relative to the shift start time, the activity can start. If you selected Actual time from the Actual or relative time list box, this time is the absolute latest start time the activity can start.
Possible times increment	The possible amount of time to increment the start time.
Counts toward paid time	Select this check box if the activity counts toward paid time.
Counts toward contiguous work time	Select this check box if the activity counts towards contiguous work time.
Description	A description of the activity.

To delete an activity, do the following:

- Click the activity to delete.
- Right-click the **Activities** tab, and then click **Delete**, or, in the toolbar in the top section, click **Delete**.
- In the **Confirm Delete** dialog, click **Yes**.

To copy and paste an activity, do the following:

- Click the activity to copy.
- Right-click the **Activities** tab, and then click **Copy**, or in the toolbar in the top section, click **Copy**.
- Right-click in the **Activities** tab and then click **Paste**, or in the toolbar in the top section, click **Paste**. The **Paste Activity** dialog appears and is populated with the copied activity's information.
- Change the information as needed.

To edit an activity, do the following:

- Click the activity to edit.
- Right-click the **Activities** tab, and then click **Edit**, or in the toolbar in the top section, click **Edit**. The **Edit Activity** dialog appears.
- Change the information as needed.

Configure agent assignments

- Click the **Agents** tab. The **Agents** tab appears.

The licensing of agents affects what's displayed in the available agents list. For example, if an agent is already assigned to a shift and his license is removed, the agent's name is grayed out and the workgroups, interaction types, and skills are shown as <unlicensed>. In this case, the agent cannot be assigned to a shift.

There may be a delay in updating the tab of up to 30 seconds when you change an agent's license, workgroups, skills, or interaction types. If there is a delay in updating the tab after changing an agent's license and you assign the agent to a shift, licensing is checked and a message box appears indicating the agent cannot be assigned to a shift because the agent isn't licensed.

Tip: You can show or hide the columns on the **Agents** tab by right-clicking on a column header and clicking **Choose columns...**

Note: In the top section, the **Agent Count** doesn't reflect your changes until you click **Save** in the toolbar. Agent names that display in bold indicate a change was made but hasn't been saved. After you save your changes, the bold formatting is removed from the agent names and the grid is filtered to show only the agents assigned to the shift.

- To filter the **Agents** view, do the following in the column heading to filter:

Agent	Shift Name	Shift Rotation	Workgroups	Licensed
<input type="checkbox"/>	= Day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

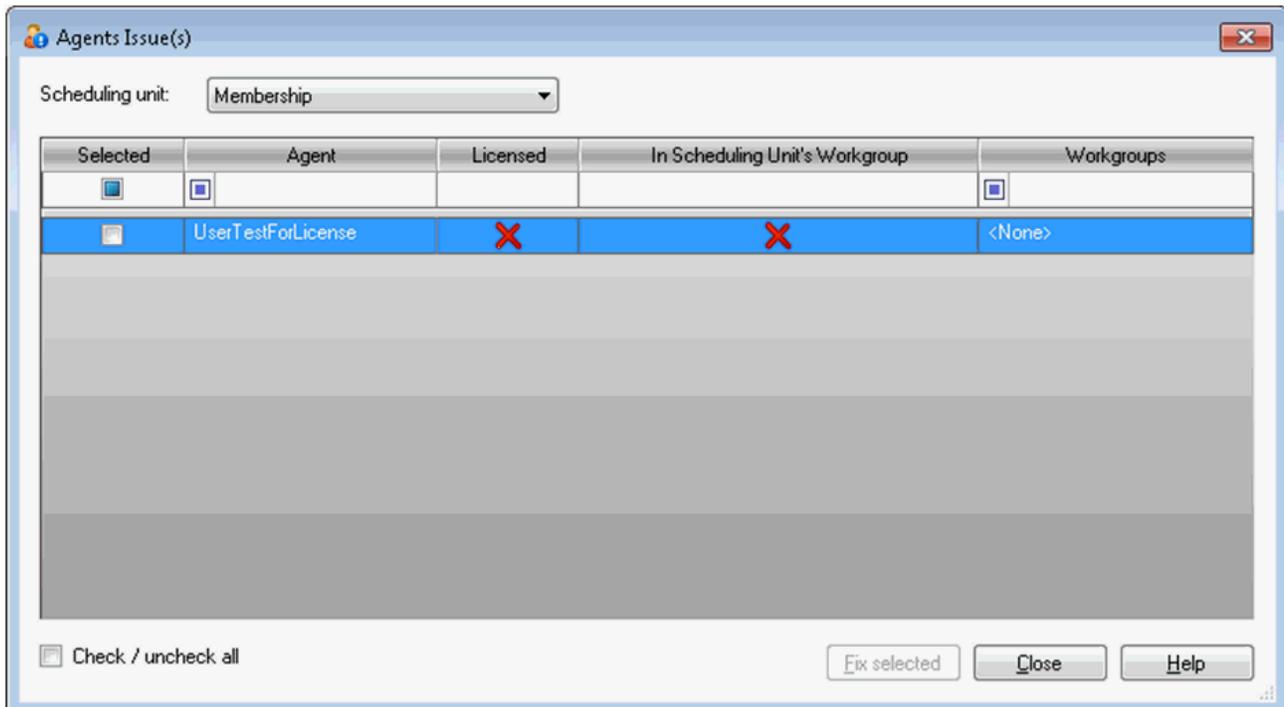
- Click the icon in the left side of the column heading.
 - Select an option and then click in the column heading box.
 - Type the value to use to filter the view. The view is filtered based on your selection. You can filter by more than one column heading at a time.
 - To clear a filter, click the icon in the right side of the column heading for each filter you want to clear.
- Do the following:

Note: Menu options and buttons are enabled or disabled based on what you are currently doing. For example, if you are editing a shift, the **Add** button is disabled. If you are assigning agents in the shift and you right-click an agent who is already associated to the shift, the **Move selected to current shift** button is disabled.

- To assign an agent to the shift, click the agent name to assign to the shift and then click **Move selected to current shift**. The selected agent name is assigned to the current shift.
- To remove an agent from the shift, click the agent name to remove and then click **Remove selected from current shift**. The selected agent is removed from the current shift.

Tip: You can multi-select individual agents by holding down the **Ctrl** key and clicking each agent to select. You can also multi-select a contiguous group of agents by clicking the first agent in the group, holding down the **Shift** key, and clicking the last agent in the group.

- To see if there are any issues with agent assignments, click **Show agent issues**. The **Agent Issue(s)** dialog appears.



There are two types of issues that display in this dialog box. They are indicated by a red X in the corresponding column.

- **Licensed:** When a red X displays in this column, it indicates the agent is not licensed to get a schedule. To solve the issue, assign a license to the agent; otherwise, the agent won't ever get a new schedule.
- **In Scheduling Unit's Workgroup:** When a red X displays in this column, it indicates the agent is not included in any of the workgroups associated to the scheduling unit. To solve the issue, assign the agent to a workgroup associated to the scheduling unit.

4. Click **Save** to keep your changes.

Delete a shift

1. In the top section of the view, click the shift to delete and then click **Delete**. The Confirm Delete dialog appears.
2. In the **Confirm Delete** dialog, click **Yes**.

Copy and paste a shift

1. In the top section of the view, click the shift to copy and then click **Copy**. The shift is copied to the clipboard.
2. Click **Paste**. The copied shift is pasted in the top section of the view.

Shift Display Options

You can specify which questions and warnings display when managing shifts.

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

Configure shift display options

1. From the [Interaction Optimizer Home page](#), in the **Configuration** area click **Shifts**. The **Shifts** tab opens.
2. In the Interaction Optimizer menu, click **Display Options...** The **Shift Display Options** dialog appears.
3. Select or clear the desired options and then click **OK**.

Understanding Shift validation

Shift data is validated when you enter it and then click outside the data entry box. If the data is determined to be invalid, one of the following icons displays, depending on the severity of the issue:

Icon	Description
	Information only – If desired, you can perform a save without making changes.
	Warning – If desired, you can perform a save without making changes; however, it is not recommended.
	Error – You cannot perform a save until you correct the error.

When you rest your mouse on an icon, a message displays that describes the issue. See the following examples of messages that will display on the Daily Constraints tab:

Informational message example

If you enter a Latest shift start time that is earlier than the Earliest shift start time, an information message displays. The message indicates the Latest shift start time is considered to occur the next day after midnight. If you didn't intend for the start time to occur after midnight the next day, change it to the desired time.

Earliest shift start time: 8:00 AM Sunday
Latest shift start time: 7:00 AM Monday (required)
Shift start time increment: 00:30
The shift's latest start time will be considered to occur the next day after midnight since the latest start time is earlier than the earliest start time.

Warning message example

If you do not enter a name for the daily constraint, a warning message displays. The message indicates you should provide a name for the constraint.

Name: 
Constraint details
Please enter a valid name for daily constraints entry

Error message example

If you enter a Maximum contiguous work time that is less than the Minimum contiguous work time, an error message displays. The message indicates the Minimum contiguous work time cannot be greater than the Maximum contiguous work time.

Minimum contiguous work time: 04:00 
 Maximum contiguous work time: 03:00
Minimum contiguous work time cannot be greater than maximum contiguous work time

Validate Shifts

You can validate shifts to check for conflicts and make adjustments if necessary. Shift validation also occurs when you add or save changes to a shift.

Validate shifts

1. From the [Interaction Optimizer Home page](#), in the Configuration area select Shifts. The Shifts tab opens.
2. In the toolbar, click the [Validate](#) icon or, in the Interaction Optimizer menu, click **Validate...** The Validate Shift dialog box opens.
3. In the **Desired shift start time** drop-down list, select a specific start time to validate or click **<All>** to validate all start times for the shift.
4. In the **Agent** drop-down list, click a specific agent to validate or click **<All>** to validate all agents assigned to the shift.
5. Click [Validate](#). The validation results appear.

Note: The Validation Results box displays informational, warning, and error messages, if applicable. Each validation differs based on the shift constraints. Some eliminated schedules are expected given flexible/overlapping constraints/activities; however, you don't want all schedules to have been eliminated.

6. If issues exist, click **Cancel** and then make adjustments to the shift.

Sort and Filter Shifts

You can sort and filter shifts when creating and maintaining schedules. When you sort in Day View, the system considers all activities in any shift, including activities that overlap midnight, when it locates the day's earliest activity.

For example, let's suppose you want to compare Shift 1 and Shift 2. Shift 1 begins at 8:00 p.m. the day before the currently selected day, has a scheduled meal from 11:00 p.m. to 11:30 p.m. and the shift ends at 4:00 a.m. The second shift, Shift 2, begins at 6:00 a.m., has a scheduled meal from 10:00 a.m. to 10:30 a.m. and the shift ends at 2:00 p.m.

If you select to sort by the earliest meal start time, because the meal begins at 11:00 p.m. the day before, Shift 1 should be sorted earlier because Shift 2's meal begins at 10:00 a.m. The sorting feature looks for the first meal, which is Shift 1's meal at 11:00 p.m. the night before.

This concept also applies when you sort by the latest shift stop time. The system includes in the sort process any shift that overlaps midnight at the end of the current day. As another example, if Shift 3 begins at 6:00 a.m. and ends at 2:00 p.m., and Shift 4 begins at 8:00 p.m. and ends at 4:00 a.m. the next day, the system considers the latest shift end time as 4:00 a.m. the next day.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page](#) **Scheduling unit** drop-down list.

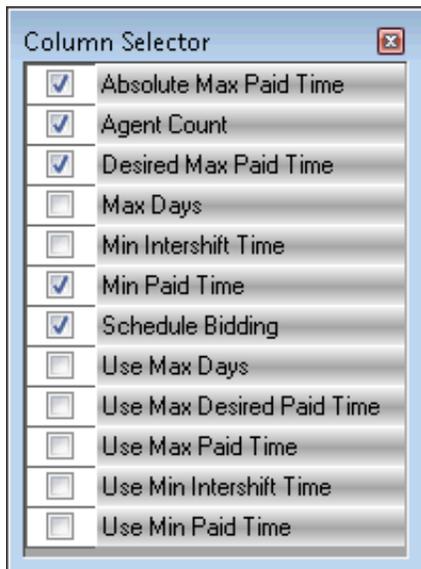
Sort and filter shifts

1. From the [Interaction Optimizer Home page](#), in the Configuration area click Shifts. The Shifts tab opens.

Tip: You can show or hide columns, change the width of columns, and change the order of columns. Your changes will be saved and used, even after you stop and restart IC Business Manager.

2. To show or hide columns in the top section of the view, do the following:

- a. Right-click in the view and click **Choose columns...** The **Column Selector** dialog opens.



- b. Select the check boxes for the columns you want to show in the tab and clear the check boxes for the columns you want to hide in the tab.

- 3. To filter the Shifts view, do the following in the column heading to filter:

Shift Name	Agent Count	Min Paid Time	Absolute Max Paid Time	Desired Max Paid Time	Use Min Paid Time	Schedule Bidding
=	=	=	=	=	<input type="checkbox"/>	<input type="checkbox"/>

- a. Click the icon in the left side of the column heading.
- b. From the drop-down list that appears, select an option and then click inside the column heading box.
- c. Type the value to use to filter the view. The view is filtered based on your selection. You can filter by more than one column heading at a time.
- d. To clear a filter, click the icon in the right side of the column heading for each filter you want to clear.
- e. To undo changes you make in the tabs in the bottom section, in the toolbar in the top section, click **Undo**.
- 4. To save changes you make in the Shifts view tab, click the **Save** button.

Show Agent Issues

To see if there are any issues with an agent assignment:

1. Do one of the following:
 - Open the Interaction Optimizer menu and select **Show agent issues**.
 - Click the agent (s) for whom to check assignment issues and then click the **Show Agent Issues** button at the bottom of the **Agents** tab.

The Agent Issue(s) dialog opens. The agents displayed here have issues either from having the "Schedulable by Optimizer" license removed, or from being removed from all the workgroups that are in the scheduling unit.

2. Select the agents that you want to fix issues and click **Fix selected**. You can also click **Check / uncheck all** to select all agents, or de-select agents that have been selected.
3. Remove the agent(s) from the agent group, shift, and shift rotation IDs from that row, but do not delete the row itself.

About shift rotations

Shift rotations allow you to assign agents to a rotation definition so that the agents can start on different weeks with different shift start times. By setting a shift rotation to an agent that is assigned to several shift definitions, the agent avoids monotonous scheduling week after week.

To create and manage shift rotations, from the [Interaction Optimizer Home page](#), in the Configuration area click **Shift Rotations**. The **Shift Rotations** tab opens. Here, you can:

1. [Add a shift rotation](#)
2. [Manage a shift rotation](#)
3. [Assign agents to a shift rotation](#)
4. [View the shift rotation report](#)

Note: When you set up shifts in a rotation, make sure you place them in the order in which you want the shifts to occur. You can enter a shift multiple time. For example, if you want agents to work a "Weekday" shift for 3 weeks and a "Weekend" shift on the 4th week, enter the shift rotation as **Weekday, Weekday, Weekday, Weekend..**

Add a shift rotation

You can assign agents to a rotation definition so that the agents can start on different weeks with different shift start times. By setting a shift rotation to an agent that is assigned to several shift definitions, the agent avoids monotonous scheduling week after week.

Note: When you set up shifts in a rotation, make sure you place them in the order in which you want the shifts to occur. You can enter a shift multiple time. For example, if you want agents to work a "Weekday" shift for 3 weeks and a "Weekend" shift on the 4th week, enter the shift rotation as **Weekday, Weekday, Weekday, Weekend**.

Add a shift rotation

1. From the [Interaction Optimizer Home page](#), in the Configuration area click **Shift Rotations**. The **Shift Rotations** tab opens.
2. Click the **Add** button. The **Shift Rotation** dialog box opens.
3. Complete the following:
 - a. In the **Name** box, enter a descriptive and unique name for the rotating shift.
 - b. In the **Start Date** field, select the date to start the rotating shift. This defines the starting date from which the agent rotation will be effective while scheduling.
 - c. If you want to end the shift rotation on a particular day, select the **End date** check box and click the **Calendar** button to select the end date.
4. In the Shifts area, highlight a currently available weekly shift definition, and click Add to assign the weekly shift definition to this shift rotation, then click OK.

Note: Add the shifts in the order in which you want them to occur. You can enter a single shift multiple times.

5. Next, [assign agents to the shift rotation](#).

Manage a shift rotation

You can edit or delete shift rotations, shift rotation settings, assigned agents, and agent assignment settings.

Edit a shift rotation and agent assignments

Note: This task assumes you have already [added at least one shift rotation](#).

1. From the **Shift Rotations** tab, in the **Shift Rotations** area, select the shift you want to edit and click the [Edit](#) button. The **Shift Rotation** dialog box opens.
2. Make any of the following changes:
 - a. In the **Name** box, update the descriptive and unique name for the rotating shift.
 - b. In the **Start Date** field, update the start date for the rotating shift. This defines the starting date from which the agent rotation will be effective while scheduling.
 - c. If you want to modify the end date, select the **End date** check box and click the **Calendar** button to update the end date.
 - d. In the **Shifts** area, add or remove weekly shift definitions to this shift rotation, then click **OK**.

Edit an agent assignment

1. In the **Agent Assignment** area, select the agent who has the assignment you want to edit and click the [Edit](#) button.
2. Make any of the following changes:
 - a. In the **Shift Rotation** drop-down list box, select a different rotating shift to assign to the agent.
 - b. In the **Assignment Settings** area, update the agents start and end dates.
 - c. In the **Select starting shift** area, select the first shift in the rotation to assign to the agent and click **OK**.

Delete a shift rotation

To delete a shift rotation, in the **Shift Rotations** area, select the shift you want to delete and click the [Delete](#) button.

Remove an agent from a shift rotation

1. In the **Shift Rotations** area, select the shift that contains the agent you want to remove.
2. In the **Agent Assignment** area, select the agent to remove and click the [Delete](#) button.

Assign agents to a shift rotation

After you add a shift rotation, you can assign agents to it. The Agent Assignment area of the Shift Rotations tab displays the agents assigned to the associated shift rotation. The agent name, start shift rotation, next week's shift, position in the rotation, and start date information are displayed.

Note: Start shift must be selected to continue with the agent assignment. Also, the agent start date can not be prior to the shift rotation start date.

Assign agents to the shift rotation

Note: This task assumes you have already [added at least one shift rotation](#).

1. From the **Shift Rotations** tab, in the **Agent Assignment** area, click the **Add** button. The **Agent Assignment** dialog box opens.
2. In the **Shift Rotation** drop-down list box, select the rotating shift to which you want to assign agents.
3. In the **Select agents for assignment** area, select the agents to add. Hold the **Shift** key to select multiple consecutive agents, or hold the **Ctrl** key to select non-consecutive agents.
4. In the **Assignment Settings** area, select the agents' start and end dates:
 - a. In the **Start Date** field select the date to start the rotating shift.
 - b. If you want to end the date on a particular day, select the **End date** check box and click the **Calendar** button to select the end date.
5. In the **Select starting shift** area, select the first shift in the rotation to assign to the agent(s) and click OK.

View the shift report

View the shift rotation report to see how the rotation is applied to the selected agent assignment. The information displayed can be filtered by agent and date to view specific agent shift assignments, or to view assignments for future dates.

View the shift rotation and agent assignments

Note: This task assumes you have already [added at least one shift rotation](#).

From the **Shift Rotations** tab, in the **Shift Rotations** area, select the shift you want to view and click the [View report for shift rotation](#) button. The **Shift Rotation Report** dialog box opens. In this dialog box, you can select a different start date, sort and filter agent counts, and sort and filter agents assigned to the rotation.

About the Agent Details view

The Agent Details View displays a variety of information about agents on one tab, including start and end dates; accrual reference dates; team, workgroup, and agent group assignments; and shift schedules and rotations.

You can also perform a variety of tasks related to an agent or group of agents, such as modifying dates and team assignments.

Display Name

The agent's displayed name as configured by his or her administrator.

User Name

This is the agent's user name in Interaction Administrator.

Start Date

The date used to determine whether or not to create a schedule for an agent. If an agent's start date is after the start of the forecast schedule entry, no schedules will be created for that agent.

End Date

The date used to determine whether or not to create a schedule for an agent. If an agent's end date is before the start of the forecast schedule entry, no schedules will be created for that agent.

Accrual Reference Date

The date used to calculate increases in an agent's accrual balances. This value is typically the same as the "Start Date", but if the agent negotiated a different rate for vacation or another activity, you can use the accrual reference date to reflect the date. For example, let's assume agents normally receive 2 weeks of vacation per year for the first 3 years, and 3 weeks of vacation per year after the third year. One agent, however, negotiated for 3 weeks of vacation per year beginning at the hire date. This agent's start date can be 1/1/2014, but the accrual reference date is 1/1/2011 to accrue the higher rate immediately.

Team

The name and description for teams can be any string that the administrator wants to use.

Workgroups

The name of the workgroup or workgroups to which the agent is assigned.

Shift

The shift or shifts assigned to the agent.

Shift Rotation

The shift rotations to which the agent is assigned.

Agent Group

The agent groups to which an agent belongs.

For more information on teams and agent details, see the **Related Topics**.

Manage the Agent Details view

You can sort and filter agent details, manage views, and you can modify specific fields, if necessary.

1. From the **Interaction Optimizer Home** page, in the **Configuration** area click **Agent Details**. The Agent Details tab opens.
2. Do one of the following:
 - To manage views and show or hide columns, right-click any of the columns in the view and from the menu that appears select or deselect the columns you want to show or hide.

Note: Select from Accrual Plans, Accrual Reference Date, Agent Group, Base Schedules, Coverage Group, Data Needs Review, Display Name, End Date, Interaction Types, Shift, Shift Rotation, Skills, Staff Type, Start Date, Team, User Name, Workgroup, Auto size a single or all columns.

- To filter the agent details, click the icon in the left side of the column heading and from the drop-down list that appears, select an option and then click inside the column heading box. Type the value to use to filter the view, or where applicable use the icons on the right side of the column heading to select available values. The view is filtered based on your selection.
 - To sort a column, click anywhere in the header that contains the criteria by which you want to sort.
 - To add additional columns of information, right-click in the header area and select the criteria you want to add.
 - To modify **Start Date**, **Accrual Reference Date**, or **End Date**, click in the appropriate field and enter the new date.
 - To change the agent's team, click in the agent's **Team** field and from the drop-down list that appears choose the appropriate team. You can also change team assignments for multiple agents at once by multi-selecting the agents and clicking either the **Assign selected agent(s) to team** or **Remove selected agent(s) from team(s)** button.
3. To save changes you make to the **Agent Details** tab, click the [Save](#) button.

Add a team

After you add agents to a teams, you can use it in filters for other views.

1. From the **Interaction Optimizer Home** page, in the **Configuration** area click **Agent Details**. The Agent Details tab opens.
2. Click the **Manage Teams** button. The Manage Teams dialog box opens.
3. Click the [add](#) button.
4. In the **Name** field, add a descriptive name for the team and in the **Description** field, optionally add details about the team.
5. Click **OK** to return to the Agent Details tab.
6. Next, [add agents to a team](#).

For more information on teams and agent details, see the **Related Topics**.

Add agents to a team

You can add many agents to teams at the same time.

1. From the **Interaction Optimizer Home** page, in the **Configuration** area click **Agent Details**. The Agent Details tab opens.
2. If you have not already done so, [create at least one team](#).
3. Select the agent or agents you want to add to the team and click the **Assign selected agents to a team** button. The Agent Team Assignment dialog box opens.
4. In the **Set team of agent(s) to** drop-down list, choose the desired team.
5. Click **OK** to return to the Agent Details tab.
6. Click the [Save](#) button.

For more information on teams and agent details, see the **Related Topics**.

Manage teams

You can delete teams, rename teams, remove agents from teams.

1. From the **Interaction Optimizer Home** page, in the **Configuration** area click **Agent Details**. The Agent Details tab opens.
2. Click the **Manage Teams** button. The Manage Teams dialog box opens.
3. Do one of the following:
 - To delete a team, select the team to remove and click the **delete** button.
 - To rename a team, click the **Name** field for the team you want to edit and enter a new name.
 - To add or update a team description, click the **Description** field for the team you want to edit and enter the new description.
4. Click the **OK** button.

For more information on teams and agent details, see the **Related Topics**.

View the Upgrade Log

The Upgrade Log lists data changes performed when a service update is applied. Service updates automatically apply changes that move data to new tables or improve the quality of Interaction Optimizer data.

You can access the Upgrade Log from the Interaction Optimizer Home page, or from the Agent Details view and review these upgrade details:

- **Version.** The integer value of the specific upgrade (used as the default sort order).
- **Summary.** The description linked to the upgrade version number.
- **Level.** The level of importance of the record in the upgrade log (for example, Info, Verification Required, Warning, Error). Records with any level other than Info means that you should review the record.
- **Upgrade Date Time.** The date and time the upgrade was performed.
- **Notes.** A full description of an upgrade changes.

Review data about agent details

Service updates automatically apply changes that move data to new tables or improve the quality of Interaction Optimizer data. A service upgrade may cause issues with merged agent data; for example, duplicate IO_Agent rows.

If an applied service upgrade results in agent data that requires administrative review, the **Data Needs Review** column appears on the Agent Details tab, and a check mark appears next to agents that you need to review. Do the following:

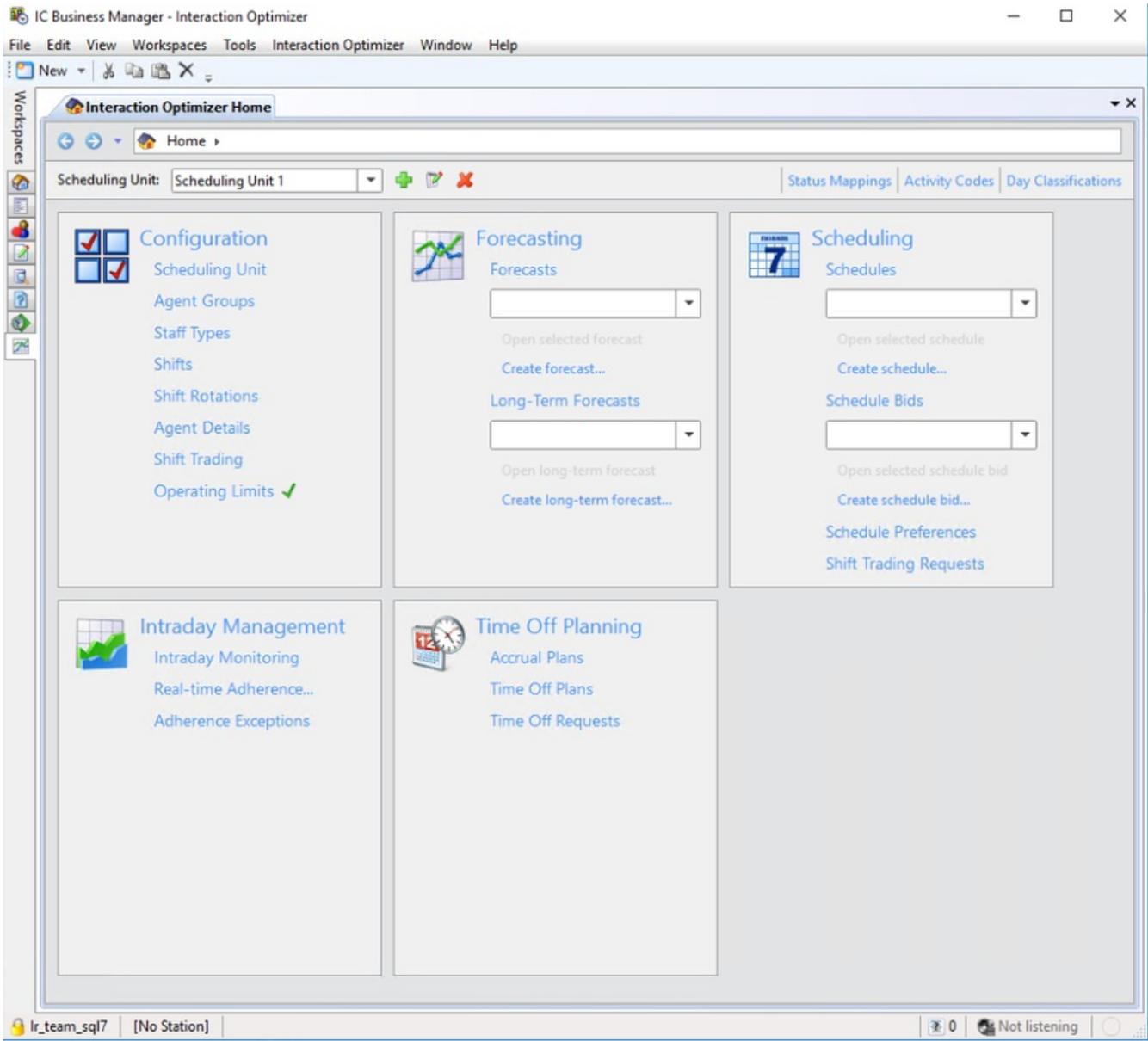
1. Review the information for the agent, such as agent group, shift, and shift rotation and update as necessary. For more details about changes applied during the service upgrade, [review the upgrade log](#).
2. After you update agent data or determine that no action is required, on the Agent Details tab select the agent and click the **Mark selected agents as reviewed** link.

Note: You can select multiple agent rows at the same time and mark them all as reviewed.

After you review agents, the **Mark selected agents as reviewed** link disappears. No further action is required.

Operating limits

Interaction Optimizer uses operating limits to help monitor your system. When you view the Interaction Optimizer home page for a selected scheduling unit, the system displays a status icon next to **Operating Limits** in the **Configuration area**.



The Interaction Optimizer home page can display the following icons to represent the status of the scheduling unit:

- 
 A green check mark indicates that the scheduling unit is within the operating limits.
- 
 A red circle with an X indicates that the scheduling unit exceeds operating limits.

We recommend that you view operating limits for a scheduling unit, when:

- A scheduling unit is approaching a supported limit.
- You create a new scheduling unit or configure scheduling unit parameters.

For more information about operating limits and modifying a scheduling unit that exceeds operating limits, see [Interaction Optimizer configuration scale](#) in the Interaction Optimizer Requirements and Limitation Technical Reference.

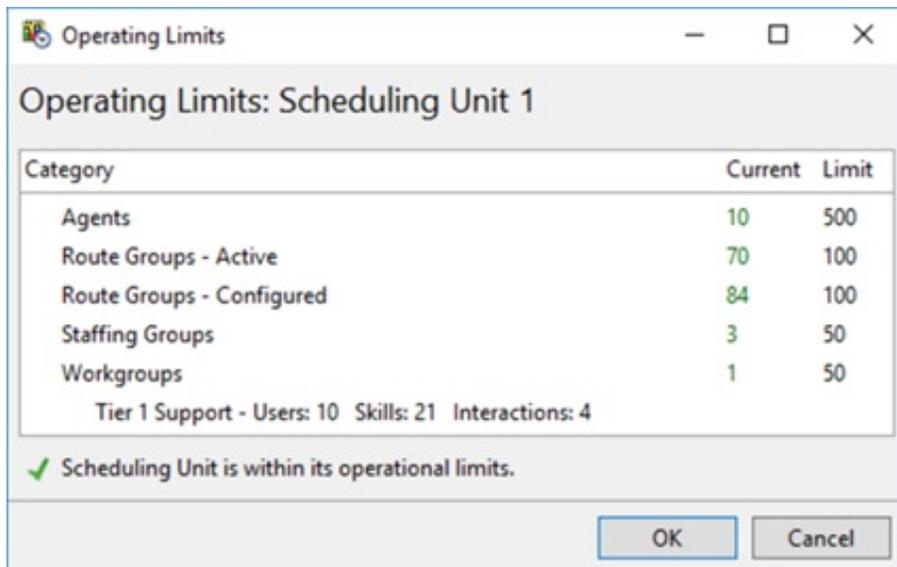
How to view operating limits for a scheduling unit

Video:

From the Interaction Optimizer home page, you can view the operating limits for a scheduling.

1. From the **Interaction Optimizer Home** page, use the **Scheduling Unit** list to select a scheduling unit.
2. In the **Configuration** area, click **Operating Limits**. The **Operating Limits** dialog box opens.

The following example shows the **Operating Limits** dialog box for Scheduling Unit 1. In this example, Schedule Unit 1 is within the operating limits:



The **Operating Limits** dialog box displays details for the following categories:

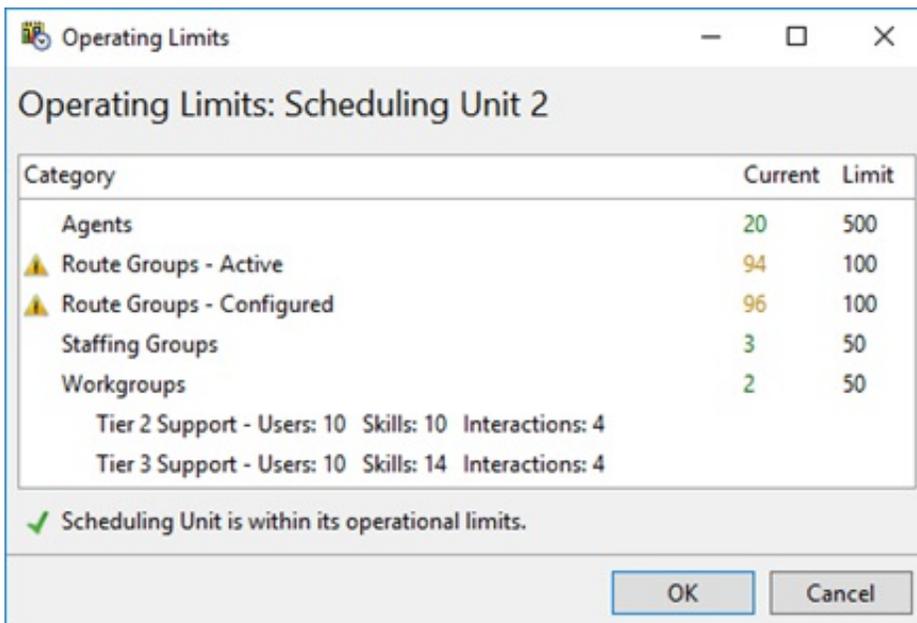
Category	Description
Agents	The number of unique agents currently assigned to the scheduling unit. Note: A user assigned to multiple workgroups in the scheduling unit is counted once for the Agents metric.
Route Groups-Active	The current interaction statistics for the workgroups and interaction types selected for the scheduling unit. This metric is the unique combination of workgroup, skill, and interaction type.
Route Groups-Configured	The potential number of active route groups given the scheduling units configuration.
Staffing Groups	The current number of staff groups configured for the scheduling unit.
Workgroups	The current number of workgroups configured for the scheduling unit. Each workgroup in the scheduling unit is listed along with the number of users, skills, and interactions. An administrator or supervisor can use this information to determine the complexity of a workgroup.

The **Operating Limits** dialog box can display the following status icons and messages:

Status Icon	Message	Description
 Green check mark icon	Scheduling Unit is within the operational limits.	With the current scheduling unit configuration, the system is expected to run properly.
 Yellow warning icon		<p>A warning icon next to a category indicates that the current value is within 10 percent of the limit.</p> <p>The system is expected to run properly.</p> <p>Note: A modification to the scheduling unit could result in the category exceeding the operating limits.</p>
 Red circle with X icon	Scheduling unit has exceeded operational limits. To avoid encountering failures, restructure Scheduling Units to reduce complexity. See the Interaction Optimizer Requirements and Limitations Overview for more information. The system failed to calculate one or more report statistics indicated above.	If one or more of the categories exceeds operating limits, the scheduling unit exceeds operating limits. A system error has occurred. An administrator can review logs and contact PureConnect Customer Care.

For more information about operating limits and modifying a scheduling unit that exceeds operating limits, see [Interaction Optimizer configuration scale](#) in the *Interaction Optimizer Requirements and Limitation Technical Reference*.

The following example shows Scheduling Unit 2 with two categories approaching the operating limits. The overall status of the scheduling unit remains within operating limits.



Category	Current	Limit
Agents	20	500
 Route Groups - Active	94	100
 Route Groups - Configured	96	100
Staffing Groups	3	50
Workgroups	2	50
Tier 2 Support - Users: 10 Skills: 10 Interactions: 4		
Tier 3 Support - Users: 10 Skills: 14 Interactions: 4		

 Scheduling Unit is within its operational limits.

OK Cancel

The following example shows Scheduling Unit 3 with two categories that have exceeded limits. The overall status of the scheduling unit also exceeds operating limits.

Operating Limits

Operating Limits: Scheduling unit 3

Category	Current	Limit
Agents	40	500
✖ Route Groups - Active	280	100
✖ Route Groups - Configured	236	100
Staffing Groups	8	50
Workgroups	4	50
Tier 1 Support - Users: 10 Skills: 21 Interactions: 4		
Tier 2 Support - Users: 10 Skills: 10 Interactions: 4		
Tier 3 Support - Users: 10 Skills: 14 Interactions: 4		
Tier 4 Support - Users: 10 Skills: 14 Interactions: 4		

✖ Scheduling Unit has exceeded operational limits. To avoid encountering failures, restructure Scheduling Units to reduce complexity. See the Interaction Optimizer Requirements and Limitations Overview for more information.

OK Cancel

Forecasting overview

Interaction Optimizer's forecasting features automates the process of creating and managing short- and long-term forecasts, reducing time spent by WFM administrators to configure these calculations manually. It includes:

Note: Before you configure forecasting, make sure you select the appropriate Scheduling unit from the [Interaction Optimizer Home page](#).

Link	Purpose
Forecasts	Manage short-term forecasts, including view or modify volume and average handle time. These forecasts show interval level data for one week at a time, and are typically created for weeks less than three months in the future. Forecasts are used when generating schedules.
Long-term forecasts	Manage long-term forecasts, including view or modify volume, average handle time, and headcount requirements for many weeks. These forecasts show months or years of data, and are typically used for time off and headcount planning.

About forecast deletion

You can delete a forecast if:

- The forecast is not used by a schedule
- The forecast is used by an unpublished schedule, and the scheduling time frame is in the past.

Forecasts used in schedules impact intraday monitoring. Therefore, Interaction Optimizer prevents the deletion of a forecast used in a schedule and displays a warning, indicating that the forecast cannot be deleted.

If you select multiple forecasts to delete, and one or more forecasts are used in schedules, Interaction Optimizer will not delete any selected forecast. Best practice recommends you review the selection before attempting to delete the forecasts.

Working with short-term forecasts

The **Forecasts** area of the **Interaction Optimizer Home** page includes tools to help you plan how many interactions are expected in future weeks.

Manage short-term forecasts including viewing or modifying volume and average handle time. These forecasts show interval level data for one week at a time, and are typically created for weeks that are less than 3 months in the future. Forecasts are generally used when creating schedules

Note: Before you configure forecasts, make sure you select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Volume Forecasting allows you to review data, configure and execute interaction volume forecasts. Volume Forecasts are a part of the greater schedule creation process.

1. To [create a new forecast](#), click the **Create forecast** link.
2. To create, open, rename, and delete selected forecasts as well as manage day classifications, in the Forecasts area click **Forecasts**. The [Forecasts grid](#) opens.
3. To choose a previously created forecast, in the **Forecasts** area click the arrow at the end of the drop-down list and choose a forecast, then click the **Open selected forecast** link.

Tip: The drop-down list shows the most recently used forecasts. If you do not find the forecast you want to open, click the **Forecasts** link to view a complete list of forecasts.

AI-powered forecasting

AI-powered forecasting uses advanced functionality, features, and algorithms made available from the cloud-based AI-powered forecasting service. Interaction Optimizer sends historical data to the service. Using the historical data, the service determines outliers and missing data, selects the best forecasting method to use, and selects the parameters to use for the selected method. The [AI-powered forecast report](#) displays the results for an AI-powered forecast.

Interaction Optimizer processes an AI-powered forecast by using the server and the cloud-based forecasting service. Interaction Optimizer can process multiple AI-powered forecasts at the same time. Therefore, you can create multiple AI-powered forecasts one after the other. You do not have to wait for an AI-powered forecast to complete processing before you create another AI-powered forecast. When you create a local forecast, Interaction Optimizer requires you to wait for the local forecast to complete processing before you can create another local forecast. For example, a supervisor regularly creates forecasts for a month at a time. A supervisor can create the AI-powered forecasts at the same time rather than creating local forecasts in sequence. A supervisor can create four AI-powered forecasts at the same time to cover the next four weeks. Then a supervisor can use the **Forecasts** tab to monitor the progress and completion of the AI-powered forecasts.

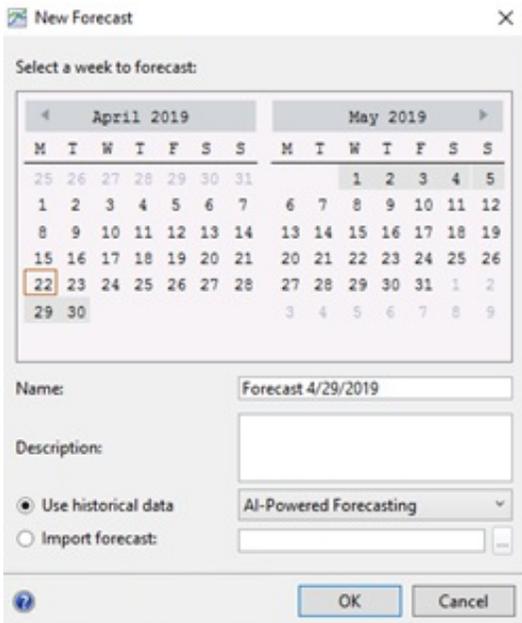
AI-powered forecasting can consume up to three years of historical data. Server configuration can control the number of weeks in the past to use for historical data and the start date for historical data. For more information about these server parameters, see [PureConnect AI-Powered Workforce Management Technical Reference](#).

Because AI-powered forecasting determines the source data to use for a forecast, the ability to [add days to a forecast](#) is unavailable for an AI-powered forecast.

AI-powered forecasting requires extra licensing and configuration. For more information, see [PureConnect AI-Powered Workforce Management Technical Reference](#).

Create an AI-powered forecast

To [create](#) a AI-powered forecast, select **AI-Powered Forecasting** in the **New Forecast** dialog.



After you create an AI-powered forecast, use the **Forecasts** tab to monitor the progress. An AI-powered forecast moves through the **Initiating**, **Uploading**, **Pending**, and **Completed** statuses. When a forecast appears in the **Completed** status, you can view the forecast and the [AI-powered forecast report](#).

AI-powered forecasts in the Forecasts tab

Forecast Name	Start Date	End Date	Modified Date	Modifier Name	Description	Type	Status
Forecast 4/15/2019	4/15/2019 12:00 AM	4/22/2019 11:59 PM	4/11/2019 7:31 AM	admin			
Forecast 4/15/2019	4/15/2019 12:00 AM	4/22/2019 11:59 PM	4/11/2019 7:42 AM	admin			Failed
Forecast 4/15/2019	4/15/2019 12:00 AM	4/22/2019 11:59 PM	4/11/2019 8:39 AM	admin			
Forecast 4/15/2019	4/15/2019 12:00 AM	4/22/2019 11:59 PM	4/19/2019 4:44 PM	admin			Complete
Forecast 4/29/2019	4/29/2019 12:00 AM	5/6/2019 11:59 PM	4/22/2019 7:34 AM	admin			
Forecast 4/29/2019	4/29/2019 12:00 AM	5/6/2019 11:59 PM	4/22/2019 7:39 AM	admin			Uploading

For an AI-powered forecast, the **Type** column contains the following icon to indicate an AI-powered forecast:



The **Status** Column indicates the following statuses:

- **Initiating** - Interaction Optimizer is establishing connection and preparing to send the request to the forecasting service.
- **Uploading** - Interaction Optimizer is extracting of the data from the database and uploading to the forecasting service.
- **Pending** - The forecast is being generated.
- **Complete** - The forecast is available for viewing.
- **Failed** – The forecast failed to generate. Open a forecast in the **Failed** status to view error information. You can create an identical forecast and resubmit. If you continue to receive a **Failed** status, contact your administrator for further assistance. After the administrator resolves the problem, you can delete a failed forecast from the **Forecasts** tab. For more information on troubleshooting, see [PureConnect AI-Powered Workforce Management Technical Reference](#).

Local forecasting

Local forecasting uses historical ACD data (and optionally, Day Selection and Weighting) to calculate the interaction volume for the next time period. ACD data is based on Route Group.

Interaction Optimizer processes a local forecast in IC Business Manager. Interaction Optimizer processes one local forecast at a time. Therefore, Interaction Optimizer requires you to wait for a local forecast to complete processing before you can create another local forecast.

Create a local forecast

To [create](#) a local forecast, select **Local Forecasting** in the **New Forecast** dialog. After you select **OK**, the forecast opens to the **Source Data** dialog box to [add days to the forecast](#).

Local forecasts in the Forecasts tab

For a local forecast, the **Type** column and the **Status** column are blank. A tool-tip displays for both columns to indicate local forecasting.

Forecast Name	Start Date	End Date	Modified Date	Modifier Name	Description	Type	Status
	=	15	=	15	=	15	
Forecast 4/15/2019	4/15/2019 12:00 AM	4/22/2019 11:59 PM	4/11/2019 7:31 AM	admin			
Forecast 4/15/2019	4/15/2019 12:00 AM	4/22/2019 11:59 PM	4/11/2019 7:42 AM	admin		☹	Failed
Forecast 4/15/2019	4/15/2019 12:00 AM	4/22/2019 11:59 PM	4/11/2019 8:39 AM	admin		☺	Complete
Forecast 4/29/2019	4/29/2019 12:00 AM	5/6/2019 11:59 PM	4/22/2019 7:34 AM	admin			
Forecast 4/29/2019	4/29/2019 12:00 AM	5/6/2019 11:59 PM	4/22/2019 7:39 AM	admin		☺	Uploading

Create a new forecast

You can create a new forecast for a designated week. Volume Forecasts uses historical or imported ACD data to calculate, or "forecast", the interaction volume and average handle time for the week you want to forecast.

Select a specific week to forecast, and then choose the previous number of weeks prior to the forecasted week to determine the specified week's forecasted data. Most often, you want to create a forecast for a week in the future; however, you can create a forecast for a previous week. In addition, you can select a forecast for any week in the future—not just for the next week. Typically, customers create forecasts for the next 1 to 6 weeks.

Tip: Creating multiple volume and headcount forecasts enables multiple schedule scenarios, which assists in determining the most appropriate schedule to publish. Having multiple scenarios allows you to select which scenario makes the most sense in terms of such factors as service level, average speed of answer, schedule efficiency, etc.

Note: Before you configure forecasts, make sure you select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Create a new forecast

1. From the **Interaction Optimizer Home** page, click **Create Forecast**. The **New Forecast** dialog opens.

Note: If you have not previously set up the scheduling unit's time zone, you will be prompted to do so before you continue.

2. In the **Select a week to forecast** area, click to highlight a week for the future volume forecast. Click the right and left arrow buttons next to the month and year to display a future or previous date.
3. In the **Name** area, enter a descriptive name for the volume forecast.
4. In the **Description** area, enter any relevant details regarding the forecast.
5. To use historical data, select the **Historical data** radio button. You must select **Use historical data** to create an AI-powered forecast.
6. Select **AI-Powered Forecasting** or **Local Forecasting**.

Select **AI-Powered Forecasting** to use cloud-based AI-powered forecasting service. AI-powered forecasting requires additional licensing and configuration, see [PureConnect AI-Powered Workforce Management Technical Reference](#).

Select **Local Forecasting** to use traditional forecasting available in Interaction Optimizer. If you do not have licensing for AI-powered forecasting, the default is a **Local Forecasting**.

7. To import a custom previously exported Interaction Optimizer forecast by using an Excel (.xls) file, select the **Import forecast** radio button. Then click [Browse](#) to navigate to the file to import. You cannot import data for an AI-powered forecast.

Tip: Export an existing forecast to see the format of the excel file. After you open an existing forecast, select the option to export. The format of the exported file is the format to use for the import file.

8. Click **OK**. For a local forecast, the forecast opens to the **Source Data** dialog box to [add days to the forecast](#). For an AI-powered forecast, the forecast is submitted to the forecasting service for processing.

Add days to a forecast

Note: AI-powered forecasting determines the source data to use for a forecast. Therefore, the ability to add days to a forecast is unavailable for an AI-powered forecast.

You can create a new volume forecasts for a designated week. Volume Forecasts uses historical ACD data (and optionally, Day Selection and Weighting) to calculate or "forecast" the interaction volume for the next time period. ACD data is based on Route Group.

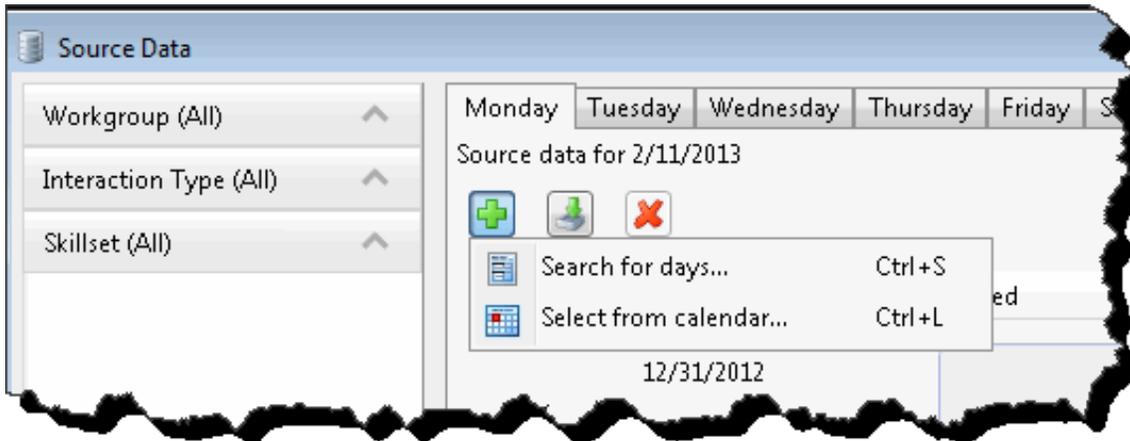
Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

Creating multiple volume forecasts enables multiple schedule scenarios, which assists in determining the most appropriate schedule to publish. Having multiple scenarios allows you to select which scenario makes the most sense in terms of such factors as service level, average speed of answer, schedule efficiency, etc.

Add days to a forecast

This topic assumes you chose to [create a new forecast](#) or have [opened an existing forecast](#) from the Interaction Optimizer Home page. You can add days to the forecast from the [Source Data dialog box](#).

1. To open the Source Data dialog box do one of the following:
 - On the toolbar, click the [Source Data](#) button.
 - Open the **Interaction Optimizer** menu and select **Source Data**.
2. From the Source Data dialog, click the [Add](#) button and select one of the following:



- Search for days
- Select from calendar

Add days to a forecast using the Search for days feature

If you chose **Search for days**, the **Add Days for** dialog box opens:

Add Days

Day of week: Monday

Day classification: None

Date range: 12/9/2012 15 1/20/2013 15

Matching Days	Classification	Exclude from forecast
Monday, 1/14/2013		
Monday, 1/7/2013		
Monday, 12/31/2012		
Monday, 12/24/2012		
Monday, 12/17/2012		
Monday, 12/10/2012		

Buttons: Add, Close

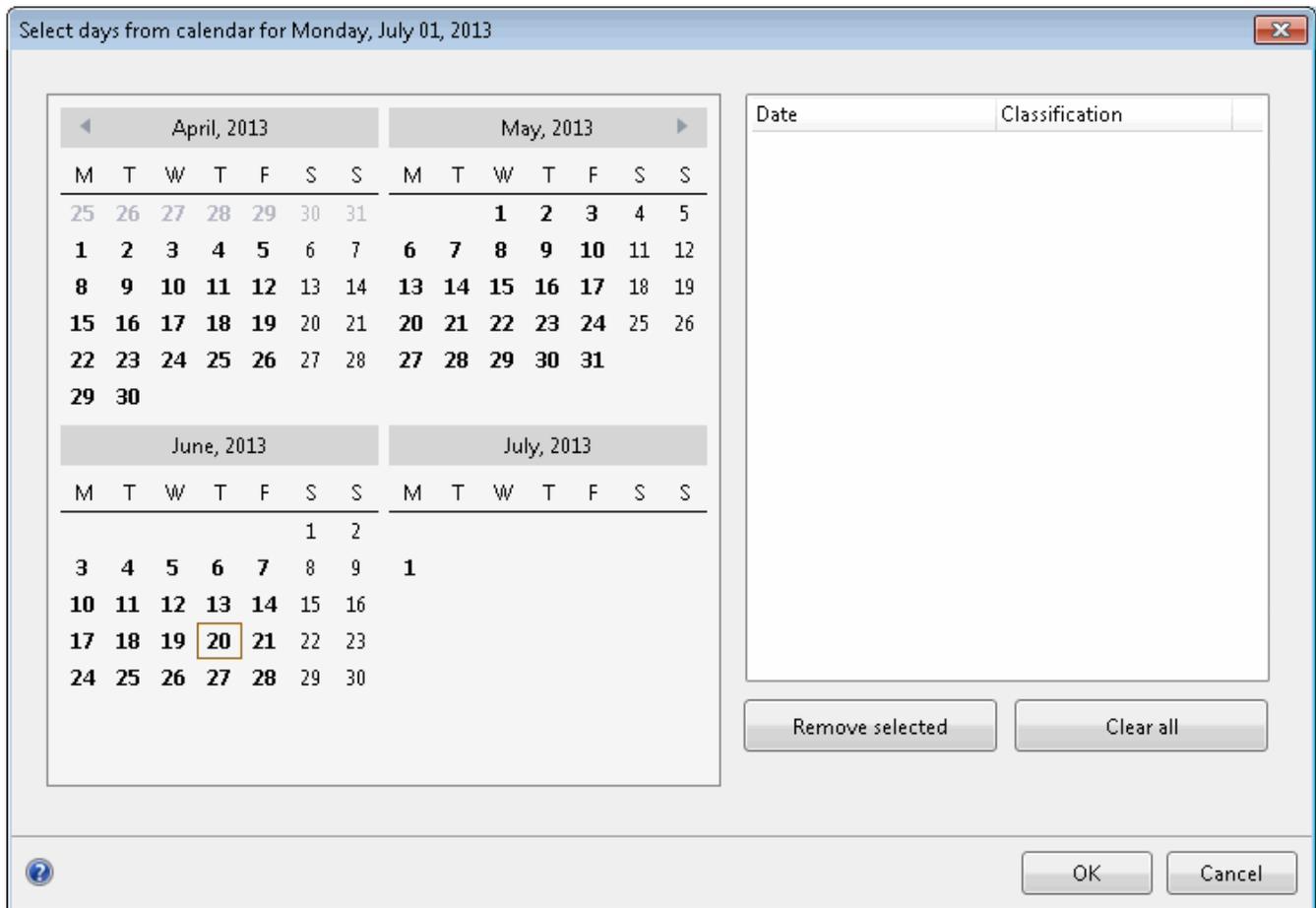
Note: The **Add Days** for dialog box allows you to add additional days but will not remove existing days. For example, if you create a forecast based on the past 6 weeks and then use the **Add Days** feature to select a number of days from the same week last year, Interaction Optimizer includes both sets of days in the forecast.

1. To search for a specific day of the week, click the arrow at the end of the **Day of week** drop-down list and select the days you want to add to the forecast.
2. To search for a specific day classification, click the arrow at the end of the **Day classification** drop-down list and select the day classifications you want to include in the forecast.
3. Click the arrow at the end of the **Date Range** drop-down list and choose to select from a range of dates, a number of weeks, or a number of occurrences.
4. Depending on your selection in step 3, do one of the following:
 - If you chose Date Range, select the start and end dates from the calendar boxes.
 - If you chose Number of weeks, use the up or down arrows to choose the number of weeks on which to pick additional days for the forecast.
 - If you chose Number of occurrences, use the up or down arrows to choose the number of occurrences on which to pick additional days for the forecast.
5. Click **Add**.

Add days to a forecast using the **Select from calendar** feature

If you chose **Select from calendar**, the **Select days from calendar** dialog box opens. Click to add or remove any days and click **OK**.

Note: If you select a date that contains no data, Interaction Optimizer does not include it in the **Source Data** list.



Import days to or delete days from a forecast

1. To import data from an Excel spreadsheet, click the [Import source Data](#) button.
2. To remove a day from the forecast, select it and click the [Delete](#) button.

Add a forecast modification

From the **Forecast** dialog box, in the **Modifications** area click [Add](#) to open the **Add Modification** dialog box and configure a modification.

To add a modification:

1. Select the category or categories for which you want to create the modification:
 - On the left side of the dialog box, click the down arrow to expand the category. Your choices are Day, Service Goal Group, Workgroup, Interaction Type, or Skillset.
 - To include certain kinds of data in the forecast, select the check box next to the desired item you want to add. For example, you may want to include every day of the week, or you may want to apply the modification to an additional workgroup.

- To exclude certain types of data from the forecast, clear the check box next to the item you want to remove. For example, you may want to exclude weekends or certain interaction types.
2. Optionally narrow the time to which you want to apply the modification:
- In the date range bar at the bottom of the modification screen, click and hold your mouse on the left and right toolbar controls to filter down to a specific time range.
 - In the date range bar at the bottom of the modification screen, click and hold your mouse on the scrollbar to move the predefined timeframe to another slot on the graph.
3. Configure the filter and modification:
- The default selection is Number of Interactions. To select another metric, at the top of the dialog box click the arrow at the end of the Number of Interactions drop-down list and select the filter.

Filter	Description
Number of Interactions	The projected number of interaction types in the forecast range.
Average Talk Time	The projected average time, in seconds, of an interaction.
Average ACW Time	The projected number of time, in seconds, that all after call work occurrences took for this call.

- Click the arrow at the end of the Modification field and select the modification you want to apply.

Modification	Description
Set value over range	Change the total value of all selected data. For example: Changing the total number of interactions for the week from 5000 to 6000.
Set value per interval	Overrides the projected value per interval to a pre-defined, hard-coded value. For example: Assume the projected total interactions for Friday from 4:00 p.m. to 5:00 p.m. is 230 (115 interactions from 4:00 to 4:30 and 115 interactions from 4:30 to 5:00). To decrease the projection to 100, in the Set value per interval field enter -15. The system decreases the 4:00 to 4:30 projection to 100 and the 4:30 to 5:00 projection to 100. The new projected total interactions value is 200.
Change value by percent	Increase or decrease the projected or forecasted value by a certain percent. For example: If the projected number of interactions is 116 and you want to increase the projection by 25%, type 25. The projected total interactions changes to 145. If you want to decrease the value by 10%, enter -10. The projected total number of interactions changes to 105.
Change value over range	Increase or decrease the projected value by a specific number. For example: If the projected average talk time is 300 seconds and you enter -60, the projected average talk time is 240 seconds. If you enter 120, the projected average talk time is 420.
Change value per interval	Increase or decrease the projected total interactions by a specific number. For example: Assume the projected total interactions for Monday from 12:00 p.m. to 1:00 p.m. is 30 (14 interactions from 12:00 to 12:30 and 16 interactions from 12:30 to 1:00). To increase the projection to 50, in the Change value per interval field enter 10. The system increases the 12:00 to 12:30 projection to 24 and the 12:30 to 1:00 projection to 26. The new projected total interactions value is 50.
Minimum	Set a minimum value for the projected range. These values are applied per interval, per route group (a combination of workgroup, interaction type, and skillset). For example: Assume you have a route group that does not receive a significant number of calls. If you set the minimum to 1, Interaction Optimizer ensures there is always some volume for the route group.
Maximum	Set a maximum value for the projected range. These values are applied per interval, per route group (a combination of workgroup, interaction type, and skillset).
Smoothing	Move the Smoothing bar to fit the data to a curve.

- If the interval you select does not have any interactions, you will be given options to configure the modification by adding other workgroups, interaction types, skills, average talk time values or after call work values.

4. Click **OK** to close the **Add Modification** dialog box and return to the forecast.

Manage a modification

You can edit, delete, deactivate, or arrange the order of modifications.

Edit or delete a modification

1. To edit a modification:
 - From the **Forecast** tab select the modification to change and click the **Edit** button. The **Edit Modification** dialog box opens.
 - Make your desired updates, then click **OK** to save your changes and return to the forecast.
2. To delete one or more modifications, from the **Forecast** tab select the modification or modifications to change and click the **Delete** button.

Deactivate a modification and save it for future use

Locate the modification you want to remove from the forecast and select it to clear the **Enabled** check box. The modification no longer applies to the forecast, but is saved for later use, or use in another forecast.

Arrange the order in which Interaction Optimizer applies a modification

Select the modification or modifications you want to move and use the up or down arrows to arrange the order in which Interaction Optimizer applies it.

Configure forecast display options

In the **Forecast Display Options** dialog, you can choose which values are shown, whether to show data points on graphs or to show the actual values, and the time zone and format.

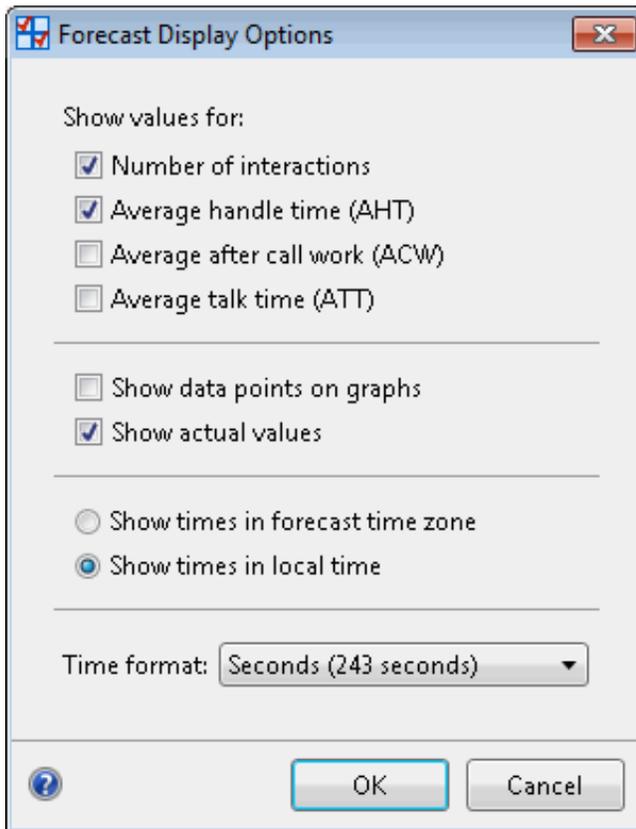
Note: Before you configure forecast display options, ensure you have opened the forecast you want to configure.

To configure forecast display options:

1. From the [Interaction Optimizer Home page](#), in the Forecasts area do one of the following:
 - Click the **Forecasts** link. The **Forecasts grid** opens. Double-click the forecast for which you want to configure options. The **Forecast** tab opens.
 - Select the appropriate forecast from the drop-down list and click **Open Selected Forecast**. The **Forecast** tab opens.

Tip: The drop-down list shows the most recently used forecasts. If you do not find the forecast you want to open, click the **Forecasts** link to view a complete list of forecasts.

2. Click **Display options** or open the **Interaction Optimizer** menu and choose **Display Options**. The **Forecast Display Options** dialog box opens:



3. In the **Show values for** area, select the desired check boxes for which you want to view values:

- Number of interactions
- Average handle time (AHT)
- Average after call work (ACW)
- Average talk time (ATT)

4. To customize the graph view, select the **Show data points on graphs** check box and/or the **Show actual values** check box.

Note: If this is a forecast created for a future date, the Show actual values check box is not available.

5. To configure time display, select one of the following:

- Show times in forecast time zone (the time zone set for the Scheduling Unit when you initially created the forecast)
- Show times in local time zone

6. Click the arrow at the end of the **Time format** drop-down list and select one of the following:

- Seconds
- Minutes

7. Click **OK**.

Export coverage to Excel

You can use the Export Coverage to Excel feature to port the current schedule or forecast per route group for each interval into an Excell file. The file can be saved to another location and renamed for future use.

1. On the **Interaction Optimizer** menu, select **Export Coverage to Excel**.
2. Save the file to the desired location.

AI-powered forecast reports

With [AI-powered forecasting](#), you can view AI-powered forecast reports. Local forecasts do not have access to these reports. An AI-powered forecast report includes descriptive information at the beginning of the report to explain:

- Our approach
- Data processing
- Missing data
- Outliers
- Model generation

Under **Workgroups and Route Groups**, you can find links to the reports for each route group in a workgroup. A report includes a section for the following forecast metrics:

- Offered
- Average Talk Time in Seconds
- Average ACW Time in Seconds

For each forecast metric, the report includes sections for missing data, outliers, model generation, and other analyzer methods. The following example illustrates an AI-powered forecast report.

The screenshot shows a window titled "AI-Powered Forecast Report - Forecast 4/29/2019". The main content is titled "AI-Powered Forecast Report - Forecast 4/29/2019" and "workgroup2 - French - Calls". It features several sections: "Offered", "Missing Data" (listing times from 3/10/2019 1:45:00 AM to 2:30:00 AM), "Outliers", "Model Generation", and a table for "Method Name", "Optimal Parameters", and "Cross-Validation Error".

Method Name	Optimal Parameters	Cross-Validation Error
Moving Average	movingAveragePeriod: 9	Mean Squared Error: 30188.57

Other Analyzed Methods

Curve Fit
 Point Estimate using Weighted Average
 Random Walk

Average Talk Time in Seconds

Missing Data

Outliers

3/10/2019 1:45:00 AM
 3/10/2019 2:00:00 AM
 3/10/2019 2:15:00 AM
 3/10/2019 2:30:00 AM

Model Generation

Method Name	Optimal Parameters	Cross-Validation Error
Moving Average	movingAveragePeriod: 12	Mean Absolute Error: 10.48 Mean Squared Error: 156.1 Mean Error At Peak: 9.24

Other Analyzed Methods

Curve Fit
 Point Estimate using Weighted Average
 Random Walk

Average ACW Time in Seconds

Missing Data

Outliers

3/10/2019 1:45:00 AM
 3/10/2019 2:00:00 AM
 3/10/2019 2:15:00 AM
 3/10/2019 2:30:00 AM

Model Generation

Method Name	Optimal Parameters	Cross-Validation Error
Curve Fit	trendFitType: DOSE_RESPONSE trendParameters: 84.70757233781043, 86.0395670157748, 39.28710870369601, 3.99922420887139	Mean Absolute Error: 2.42 Mean Squared Error: 8.8 Mean Error At Peak: 2.92

Other Analyzed Methods

Moving Average
 Point Estimate using Weighted Average
 Random Walk

[Index](#)

[workgroup2](#)

[Next](#)

Note: AI-powered forecast reports are not available for local forecasts.

1. From the **Forecasts** tab, open an AI-powered forecast in the **Complete** status.
2. If you plan to use the **Run Report for Selected items** option, click to expand the categories and select or clear the filtering options on the left side of the page.
3. On the toolbar, click the **Reports** button to **Run Report for all Items**. You can expand the **Reports** button and select **Run Report for Selected Items** or **Run Report for All Items**. The AI-powered forecast report appears.
4. You can:
 - Click a route group under **Workgroups and Route Groups** to display the report for a route group in the workgroup.
 - Use the buttons (for example, **Next** and **Previous**) at the bottom of the report to navigate through the report.
 - Right-click and select **Print** to print a report.

Working with long-term forecasts

The **Long-Term Forecasts** area of the **Interaction Optimizer Home** page includes tools to help you calculate time off and headcount planning. Long-term forecasts include months or years of data.

Note: Before you configure forecasts, make sure you select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

1. To [create a new long-term forecast](#), click the **Create new long-term forecast** link.
2. To create, open, rename, and delete selected forecasts as well as manage day classifications, in the Forecasting area click **Long-Term Forecasts**. The [Long-term forecasts grid](#) opens.
3. To choose a previously created forecast, in the **Long-Term Forecasts** area click the arrow at the end of the drop-down list and choose a forecast, then click the **Open long-term forecast** link.

Tip: The drop-down list shows the most recently used forecasts. If you do not find the forecast you want to open, click the **Long-Term Forecasts** link to view a complete list of forecasts.

Create a new long-term forecast

1. From the Interaction Optimizer Home page, in the Forecasting area select **Create long-term forecast**. The New Long-Term Forecast dialog box opens.
2. Enter a name and optional description for the forecast.
3. In the **Forecast start date** and **Forecast end date** areas, click to highlight the time frame for the long-term forecast. Click the right and left arrow buttons next to the month and year to display a future or previous date.
4. To use historical data, select the **Historic data** radio button and click to highlight the time frame from which to import historical data.
5. To import an Excel (.xls) file, select the **Import weekly data** radio button and do one of the following:
 - Click [Browse](#) to navigate to the file you want to import.
 - Click **Download weekly template** and manually incorporate your forecast data.
6. Click **OK**.
7. If applicable, the New Long-Term Forecast: Select Representative Week dialog box opens. [Select the weeks to use when creating an average representative forecast](#).

Create representative weeks for a long-term forecast

Optimizer uses the representative week to distribute weekly numbers to daily numbers for each route group. In this dialog, you can merge any number of the past 8 weeks into a single "Representative Week".

Note: This dialog also appears if you run the Set Value modification on a week with a 0 value.

Best practice recommends that, for a more accurate average, you select typical weeks. Optimizer uses the average representative week when it converts weekly data to daily or hourly numbers.

1. Review the weeks you want to use to create an average representative long-term forecast week. By default, all weeks are selected.
2. Deselect any non-typical weeks, or weeks you do not want to include, and click **OK**. The Generating long-term forecast "name" page opens.
3. When prompted, click **OK**.

Long-term forecast generation

After you create the long-term forecast, select representative weeks if applicable, and generate the forecast, the Generating long-term forecast page opens. This page displays status messages as the long-term forecast generation progresses, such as loading historic data or generating forecast.

When you see the **Long-term forecast generation is complete** message, review the status messages and click OK to open the long-term forecast editor.

Working with the long-term forecast editor

On the **Long-Term Forecasts Editor** page, you can customize various aspects of the selected forecast. The graph view displays selected metric variables used to calculate the long-term forecast. On the left side of the page, click to expand the categories and display filtering options. Select or deselect the check boxes to adjust forecasting calculations. Click the panes again to collapse the views.

In the graph area, notice the following:

1. Below the graph, move the zoom control arrow to select a smaller date range.
2. The red, vertical line on the graph represents today's date.
3. Dotted lines on the graph reflect the historic data used to create the long-term forecast and cannot be adjusted.
4. User-defined modifications, once created, appear below the graph and are applied to the graph data in consecutive order, when selected. Because the modifications have their own filter set, they may not apply to the current graph data.
5. After you generate staffing requirements, the graph will include two Y-axes. Hover over the graphed lines to determine which axis applies to each graph.

Add or edit a long-term forecast modification

From the Long-term Forecast Editor page, in the **Modifications** area click [Add](#) to open the **Add Modification** dialog box and configure a modification.

To add a modification:

1. Select the category or categories for which you want to create the modification:
 - On the left side of the page, click to expand expand the category. Your choices are Metric, Interaction Type, Workgroup, Skillset, Service Goal Group, or Staff Type.
 - To include certain kinds of data in the forecast, select the check box next to the desired item you want to add. For example, you may want to include all interaction types, or you may want to apply the modification to an additional workgroup.

- To exclude certain types of data from the forecast, clear the check box next to the item you want to remove. For example, you may want to exclude average after call work (ACW) or certain interaction types.

2. To optionally narrow the time to which you want to apply the modification, do one of the following:

- In the date range bar at the bottom of the modification screen, click and hold your mouse on the left and right toolbar controls to filter down to a specific time range.
- In the date range bar at the bottom of the modification screen, click and hold your mouse on the scrollbar to move the predefined timeframe to another slot on the graph.
- In the Start Date and End Date boxes at the top of the modification screen, enter the desired date range.
- In the Start Date and End Date boxes at the top of the modification screen, click the calendar buttons to select the desired date range.

3. Configure the filter and modification:

- The default selection is Number of Interactions. To select another metric, at the top of the dialog box click the arrow at the end of the Metric list and select the desired filter.

Filter	Description
Number of Interactions	The projected number of interaction types in the forecast range.
Average Talk Time	The projected average time, in seconds, of an interaction.
Average ACW Time	The projected number of time, in seconds, that all after call work occurrences took for this call.
Required Staff	The projected number of staff members in the forecast range. This option only appears after you create staffing requirements. For information about creating staffing requirements, see the Related topics.

- Click the arrow at the end of the **Modification** field and select the modification you want to apply.

Modification	Description
Set value	Set a fixed value for every week within your time range. For example: Change the number of interactions for every week to 6000.
Set trend	Set the percentage increase that you want to occur over the entire time range. This will maintain the same basic shape. For example, say that you are doing a two year long-term forecast. Your business projects that the number of interactions will grow around 25 percent over the course of that time. If you enter 25, then the values towards the beginning of the time range will increase slightly and the values by the last week of the forecast will increase 25%.
Modify by value	Increase or decrease the value of every week by a fixed amount. For example: If the average talk time is 300 seconds and you enter -60, the average talk time is 240 seconds. If you enter 120, the average talk time is 420.
Modify by percent	Increase or decrease the value of each week by a certain percent. For example: If the forecast number of interactions is 200, 300, and 400 for 3 consecutive weeks, and you enter a Modify by percent value of 10, then the new forecast number of interactions will be 220, 330, and 440. If you want to decrease the value by 10%, enter -10.
Minimum	Set a minimum value for the selected date range. These values are applied per week, per route group (a combination of workgroup, interaction type, and skillset). For example: Assume you have a route group that does not receive a significant number of calls. If you set the minimum to 1, Interaction Optimizer ensures there is always some volume for the route group.
Maximum	Set a maximum value for the selected date range. These values are applied per week, per route group (a combination of workgroup, interaction type, and skillset).
Smoothing	Move the Smoothing bar farther to the right to increase the impact of smoothing. The total of all the interactions when smoothing will be maintained by increasing some values and decreasing others to make the curve less jagged.

3. Click **OK** to close the **Add Modification** dialog box and return to the forecast.

Edit or delete a modification

1. To edit a modification:
 - From the **Long-term Forecast Editor** page, select the modification to change and click the [Edit](#) button. The **Edit Modification** dialog box opens.
 - Make your desired updates, then click **OK** to save your changes and return to the forecast.
2. To delete a modification, from the **Long-term Forecast Editor** page, select the modification to change and click the [Delete](#) button.

Deactivate a modification and save it for future use

Locate the modification you want to remove from the forecast and select it to clear the **Enabled** check box. The modification no longer applies to the forecast, but is saved for later use, or use in another forecast.

Arrange the order in which Interaction Optimizer applies a modification

Select the modification you want to move and use the up or down arrows to arrange the order in which Interaction Optimizer applies it.

Regenerate a long-term forecast

1. From the long-term forecast editor, open the Interaction Optimizer menu and select **Regenerate Long-Term Forecast**. The **Regenerate Long-Term Forecast** dialog box opens.

Note: Before Optimizer attempts to regenerate the forecast, you may be prompted to save your changes if you haven't already done so.

2. Make any desired updates and click **OK**. The **New Long-Term Forecast: Select Representative Week** dialog box opens.
3. Select or deselect your week and click **OK**. Optimizer regenerates your forecast.

Rename a long-term forecast

In the Rename Long-Term Forecast dialog box, you can change the name of the long-term forecast and its description. This dialog box also displays the date that the long-term forecast was last modified, as well as the name of the person who made the update.

1. From the [Interaction Optimizer Home page](#), in the Forecasting area click the **Long-Term Forecasts** link. The **Long-Term Forecasts** tab opens.
2. Select the long-term forecast you want to rename and click the [rename](#) button. The **Rename Long-Term Forecast** dialog box opens.
3. Enter the updated long-term forecast name and optionally update the description.
4. Click **OK** to return to the Long-Term Forecasts tab.

Set up long-term forecast display options

In the long-term forecast **Display Options** dialog, you can choose which values are shown, whether to show historical data and staff, and the time zone and format.

Note: Before you configure long-term forecast display options, ensure you have opened the long-term forecast you want to configure.

To configure long-term forecast display options:

1. From the [Interaction Optimizer Home page](#), in the Forecasts area do one of the following:
 - Click the **Long-Term Forecasts** link. The [Forecasts grid](#) opens. Double-click the long-term forecast for which you want to configure options. The Long-Term Forecasts tab opens.
 - Select the appropriate long-term forecast from the drop-down list and click **Open long-term forecast**. The Long-Term Forecasts tab opens.

Tip: The drop-down list shows the most recently used forecasts. If you do not find the forecast you want to open, click the **Long-Term Forecasts** link to view a complete list of forecasts.

2. Click [Display options](#) or open the **Interaction Optimizer** menu and choose **Display Options**. The long-term forecast **Display Options** dialog box opens.
3. In the **Navigation Options** area, select the desired check boxes for which you want to view values:
 - Service Goal Groups
 - Workgroups
 - Interaction Types
 - Skillsets
 - Staff Types (This option only appears after you generate staffing requirements. For more information, see the Related topics)
4. Click the arrow at the end of the **Time format** drop-down list and select Seconds or Minutes.
5. To customize the metric on which to zoom for graph view, click the arrow at the end of the Zoom control metric drop-down list and select the category.
6. To show historic data and historic staff (when applicable), select the appropriate check boxes.
7. Click **OK**.

Generate staffing requirements

To generate staffing requirements for the long-term forecast:

1. Open the desired long-term forecast.
2. Open the Interaction Optimizer menu and select **Generate Staffing Requirements**. The Generate Staffing Requirements dialog box opens.
3. Optionally override the total shrinkage per day:
 - a. Click inside the box below the date for which you want to override shrinkage.
 - b. Enter the percentage by which you want to override shrinkage.

Note: This value must be between 0% and 99%.

- c. To clear all entries, click the **Reset to scheduling unit default values** link.
4. Click **OK**. The Generate staffing requirements dialog opens and begins to calculate staffing requirements. This page displays status messages as the staffing requirements generation processing progresses.
 5. When complete, click **OK** to return to the long-term forecast editor.

Generate Staffing Requirements shrinkage override dialog box

In this dialog box, optionally override the total shrinkage per day:

1. Click inside the box below the date for which you want to override shrinkage.
2. Enter the percentage by which you want to override shrinkage.

Note: This value must be between 0% and 99%.

3. To clear all entries, click the **Reset to scheduling unit default values** link.

Import Required Staffing dialog box

In this dialog box, select the long-term forecast form which to base the required staff numbers.

Scheduling Overview

The **Scheduling** area of the Interaction Optimizer Home page includes tools to help you configure and manage weekly schedules, set up and manage schedule bids, and review agent scheduling preferences for the current scheduling unit. Before you configure scheduling, make sure you select the appropriate **Scheduling unit** from the **Interaction Optimizer Home** page.

Note: Generating schedules on the CIC server can result in performance issues. We recommend you generate schedules on a client machine.

Scheduling Link	Purpose
Schedules	Click the Schedules link to open the Schedules grid , where you can manage weekly schedules, including creating, editing, publishing, and removing them.
Schedule Bids	Click the Schedule Bids link to open the Schedule Bids grid , where you can manage schedule bids, including creating, editing, activating, and removing them.
Schedule Preferences	Show the preferences for when to work or not work for the agents who belong to the current scheduling unit.
Shift Trading requests	View all unmatched, in progress, and completed shift trades.

View Modes

View schedules in three modes:

-  Day (default view):

View Schedule in Day Mode

Viewing a schedule in day mode (default view), displays 25 hours in the schedule; showing start time 1 hour before the earliest activity, and the end time 25 hours after the start time. Day mode allows editing of activities, as long as the schedule is for a future time period, or is the live (published) schedule.

View Schedule in Day Mode

Viewing a schedule in day mode (default view), displays 25 hours in the schedule; showing start time 1 hour before the earliest activity, and the end time 25 hours after the start time. Day mode allows editing of activities, as long as the schedule is for a future time period, or is the live (published) schedule.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

-  Multi-day

View Schedule in Multi-day Mode

Viewing a schedule in multi-day mode, displays daily schedules in hourly time slots, up to one week. Using the Start Time and End Time selection boxes, you can pick the start and end times to the nearest hour. Click Update to update the schedule contents after changing start and end times. Multi-day mode allows editing of activities, as long as the schedule is for a future time period, or is the live (published) schedule.

View Schedule in Multi-day Mode

Viewing a schedule in multi-day mode, displays daily schedules in hourly time slots, up to one week. Using the Start Time and End Time selection boxes, you can pick the start and end times to the nearest hour. Click Update to update the schedule

contents after changing start and end times. Multi-day mode allows editing of activities, as long as the schedule is for a future time period, or is the live (published) schedule.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

-  Week

View Schedule in Week Mode

Viewing a schedule in week mode, displays daily schedules in 24 hour (or shift) time slots, up to one week. Week mode allows editing of shifts (double-click to edit activities, as long as the schedule is for a future time period, or is the live (published) schedule.

View Schedule in Week Mode

Viewing a schedule in week mode, displays daily schedules in 24 hour (or shift) time slots, up to one week. Week mode allows editing of shifts (double-click to edit activities), as long as the schedule is for a future time period, or is the live (published) schedule.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

AI-powered scheduling

AI-powered scheduling uses advanced functionality, features, and algorithms made available from the cloud-based AI-powered scheduling service. Interaction Optimizer sends scheduling data to the service. The service:

- Leverages advanced AI-modeling to automatically generate optimized schedules.
- Ensures accurate performance predictions.

Interaction Optimizer processes an AI-powered schedule by using the server and the cloud-based scheduling service. Interaction Optimizer can process multiple AI-powered schedules at the same time. Therefore, you can create multiple AI-powered schedules one after the other. You do not have to wait for an AI-powered schedule to complete processing before you create another AI-powered schedule. When you create a [local schedule](#), Interaction Optimizer requires you to wait for the local schedule to complete processing before you can create another local schedule. For example, a supervisor regularly creates schedules for a month at a time. A supervisor can create the AI-powered schedules at the same time rather than creating local schedules in sequence. A supervisor can create four AI-powered schedules at the same time to cover the next four weeks. Then a supervisor can use the Schedules tab to monitor the progress and completion of the AI-powered schedules.

AI-powered forecasting requires extra licensing and configuration. For more information, see [PureConnect AI-Powered Workforce Management Technical Reference](#).

If you use AI-powered scheduling, you cannot:

- Copy an AI-powered schedule that uses an AI-powered forecast.
- [Change the forecast associated with a schedule.](#)
- Use [schedule bidding](#).
- [Apply time off requests.](#)
- [Edit activities.](#)

- Perform some [agent actions](#).

Create an AI-powered schedule

To [create](#) an AI-powered schedule, select AI-Powered Scheduling as the Schedule Type in the Create New Schedule dialog.

Select a week to schedule:

May 2017							June 2017							July 2017						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
24	25	26	27	28	29	30				1	2	3	4						1	2
1	2	3	4	5	6	7	5	6	7	8	9	10	11	3	4	5	6	7	8	9
8	9	10	11	12	13	14	12	13	14	15	16	17	18	10	11	12	13	14	15	16
15	16	17	18	19	20	21	19	20	21	22	23	24	25	17	18	19	20	21	22	23
22	23	24	25	26	27	28	26	27	28	29	30			24	25	26	27	28	29	30
29	30	31												31	1	2	3	4	5	6

Select a forecast:

Forecast Name	Description	Modified Date	Modifier Name
RSA 5/15/2017		4/13/2017 4:10 PM	600143113

Schedule name:

Schedule Type:

Enable schedule preferences when available

OK Cancel

An AI-powered forecast must be in **Complete** status to appear in **Select a forecast** area.

You cannot use the **Filters File** option with AI-powered schedules.

After you create an AI-powered schedule, use the **Status** column in the **Schedules** tab to monitor the progress. An AI-powered schedule moves through the **Initiating**, **Uploading**, **In Progress**, and **Complete** statuses. When a schedule appears in the **Complete** status, you can open, view, and publish the schedule.

AI-powered schedules in the Schedules tab

Type	Schedule Name	Forecast Name	Start Date	Published	Published Date	Modified Date	Modifier Name	Publish Notes	Status
	Schedule 5/29/2017	RSA 5/29/2017	5/29/2017 12:00 AM		N/A	6/4/2019 1:32 PM	navi_user		Uploading
	Schedule 5/22/2017	RSA 5/22/2017	5/22/2017 12:00 AM		N/A	6/4/2019 12:29 PM	navi_user		In Progress (15%)
	Schedule 5/15/2017	RSA 5/15/2017	5/15/2017 12:00 AM		N/A	6/4/2019 12:28 PM	navi_user		Failed
	Schedule 5/15/2017	RSA 5/15/2017	5/15/2017 12:00 AM		N/A	6/4/2019 12:25 PM	navi_user		Complete
	RSA 6/26/2017-new	RSA 6/26/2017	6/26/2017 12:00 AM	✓	6/29/2017 12:40 PM	6/29/2017 12:40 PM	600166961		
	RSA 7/03/2017	RSA 7/3/2017 Recent	7/3/2017 12:00 AM	✓	6/29/2017 12:12 PM	6/29/2017 12:12 PM	600166961		
	RSA 7/24/2017	RSA 7/24/2017 Recent	7/24/2017 12:00 AM	✓	6/29/2017 11:26 AM	6/29/2017 11:26 AM	600166961		

For an AI-powered schedule, the **Type** column contains the following icon to indicate an AI-powered schedule:



The **Status** Column can indicate the following statuses:

- **Initiating** Interaction Optimizer is establishing connection and preparing to send the request to the scheduling service.
- **Uploading** Interaction Optimizer is extracting of the data from the database and uploading to the scheduling service.
- **Pending** If a user exits IC Business Manager and opens it again, the **Pending** status appears briefly for a schedule in the **In Progress** status. Once Interaction Optimizer determines the percent complete, the status changes to **In Progress**.
- **In Progress** The schedule is being processed. The percentage complete gives the current progress.
- **Cancelling** Indicates cancellation is in progress.
- **Cancelled** The schedule is canceled.
- **Complete** The schedule is available for viewing.
- **Failed** The schedule failed to generate. Double-click a schedule in the **Failed** status to view error information. You can create an identical schedule and resubmit. If you continue to receive a Failed status, contact your administrator for further assistance. After the administrator resolves the problem, you can delete a failed schedule from the **Schedules** tab. For more information on troubleshooting, see [PureConnect AI-Powered Workforce Management Technical Reference](#).

You can cancel an AI-powered schedule if the status is **Initiating**, **Uploading**, **Pending**, and **In Progress**. To cancel an AI-powered schedule, right-click the AI-powered schedule, and select **Cancel selected schedule**.

You can delete an AI-powered schedule if the status is **Complete** or **Failed**. To cancel an AI-powered schedule, select **Delete** button on the toolbar.

Local scheduling

Local scheduling uses an enhanced scheduling engine that accurately schedules agents at optimal times. The local scheduling engine uses an advanced algorithm and calculation feature. The local scheduling engine processes local schedules at a slower rate than the AI-powered scheduling service processed [AI-powered schedules](#).

Interaction Optimizer processes a local schedule in IC Business Manager. Interaction Optimizer processes one local schedule at a time. Therefore, Interaction Optimizer requires you to wait for a local schedule to complete processing before you can create another local schedule.

Note: If you already submitted an AI-powered schedule for processing on the CIC server, you cannot create a local schedule until the AI-powered schedule completes.

Create a local schedule

To [create](#) a local schedule, select **Local Scheduling** as the **Schedule Type** in the **Create New Schedule** dialog.

Select a week to schedule:

May 2017							June 2017							July 2017						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
24	25	26	27	28	29	30				1	2	3	4						1	2
1	2	3	4	5	6	7	5	6	7	8	9	10	11	3	4	5	6	7	8	9
8	9	10	11	12	13	14	12	13	14	15	16	17	18	10	11	12	13	14	15	16
15	16	17	18	19	20	21	19	20	21	22	23	24	25	17	18	19	20	21	22	23
22	23	24	25	26	27	28	26	27	28	29	30			24	25	26	27	28	29	30
29	30	31												31	1	2	3	4	5	6

Select a forecast:

Forecast Name	Description	Modified Date	Modifier Name
<input type="checkbox"/>	<input type="checkbox"/>	=	15
RSA 5/15/2017		4/13/2017 4:10 PM	600143113

Schedule name:

Schedule Type:

Filters file (optional):

Enable schedule preferences when available

Local schedules in the Schedules tab

For a local schedule, the Type column and the Status column are blank. A tool-tip displays for the Type column to indicate local scheduling.

Type	Schedule Name	Forecast Name	Start Date	Published	Published Date	Modified Date	Modifier Name	Publish Notes	Status
<input type="checkbox"/>	<input type="checkbox"/>	=	15	<input type="checkbox"/>	=	15	=	15	<input type="checkbox"/>
	Schedule 5/29/2017	RSA 5/29/2017	5/29/2017 12:00 AM		N/A	6/4/2019 1:32 PM	navi_user		Uploading
	Schedule 5/22/2017	RSA 5/22/2017	5/22/2017 12:00 AM		N/A	6/4/2019 12:29 PM	navi_user		In Progress (15%)
	Schedule 5/15/2017	RSA 5/15/2017	5/15/2017 12:00 AM		N/A	6/4/2019 12:28 PM	navi_user		Failed
	Schedule 5/15/2017	RSA 5/15/2017	5/15/2017 12:00 AM		N/A	6/4/2019 12:25 PM	navi_user		Complete
	RSA 6/26/2017-new	RSA 6/26/2017	6/26/2017 12:00 AM	✓	6/29/2017 12:40 PM	6/29/2017 12:40 PM	600166961		
	RSA 7/03/2017	RSA 7/3/2017 Recent	7/3/2017 12:00 AM	✓	6/29/2017 12:12 PM	6/29/2017 12:12 PM	600166961		
	RSA 7/24/2017	RSA 7/24/2017 Recent	7/24/2017 12:00 AM	✓	6/29/2017 11:26 AM	6/29/2017 11:26 AM	600166961		

View Schedule Preferences

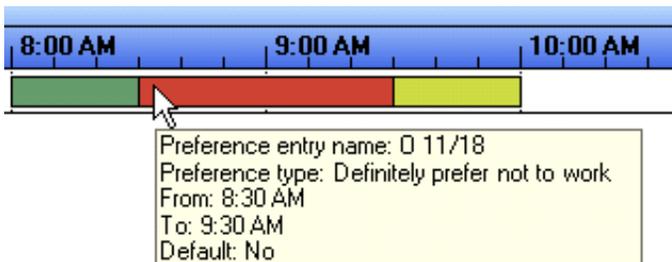
You can view all the preferences for the agents in their agent group (or across the entire scheduling unit). The agents' preferences appear in the **Schedule Preferences** tab. This view is very useful when you want to see a number of agents' preferences all at the same time. You could use this information to make decisions, for example, like picking which agent to send home at 3:30pm when the interaction volume is down, or determining whether it makes sense to create a new shift that has a later start time because a majority of agents prefer to start later rather than earlier.

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

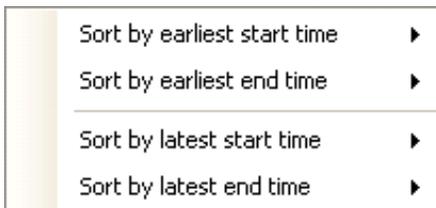
View the agent's scheduling preferences

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click **Schedule Preferences**.
2. Do any of the following:

- Hover your mouse over an interval to show preference details:



- Right-click and select a sort schedule preference option:



Note: Agents mark their preferences, such as "Would definitely like to work" or "Would prefer not to work" for whatever portion of the day they choose in Interaction Client. See the Interaction Desktop online help for more information.

View the Status Bar

The status bar displays the CIC server, the number of agents, view mode, changes not saved, editing status, and filter options that are associated with the schedule in the workspace.



CIC Server: This is the name of the CIC server that Interaction Optimizer Administrator is connected to.

Number of Agents: This is the number of filtered agents out of the total number of scheduled agents for the schedule.

View Mode: This is the type of schedule view currently being shown.

Changes Not Saved: This indicates if any changes have been made since the last save, or since the schedule was opened.

Editing Status: This indicates whether the schedule is opened in read-only or if editing is allowed.

Filter Options: This indicates whether the filter is on or if it is off. If the filter is on, then on hover or mouse-over over the status, a tooltip with the filter details is displayed.

Create and Manage Weekly Schedules

Note: Generating schedules on the CIC server can result in performance issues. We recommend that you generate schedules on a client machine.

Interaction Optimizer includes [local scheduling](#) and [AI-powered scheduling](#).

Note: You can generate a local schedule and continue working in Interaction Center Business Manager while Interaction Optimizer calculates the schedule. However, closing the tab or navigating to a different page within the same tab cancels the current schedule generation. You may freely open other tabs and work within them.

When you generate a local schedule, Interaction Optimizer displays status messages as the schedule generation progresses, such as which agent is being evaluated and what step is currently being performed in the process.

When the schedule generation is complete, you can review any applicable details, warnings, or error messages associated with the schedule. You can also view the schedule immediately or save schedule information for diagnostic and support purposes.

You can manage weekly schedules, including creating, editing, publishing, renaming, reviewing, and removing them. When you open and view the current week's schedule, the system defaults to the schedule's current day view (the day you open the view), and not the schedule's first day of the week.

Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list. From the **Interaction Optimizer Home** page, in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule** link. The Schedule tab opens. From here, you can manage schedules, including:

- [Create a New Week Schedule](#)
- [Edit Base Schedules](#)
- [Modify Activity Details](#)
- [View the Base Schedule Editor Calendar](#)
- [Rename a Schedule](#)

Create a New Week Schedule

You can generate a schedule for a specific week. For each agent, the following information is used in the order listed create his or her schedule for the week:

1. Base schedule
2. Shift rotation
3. Shift definition (shift)

Note: You cannot generate schedules on the IC server.

If an agent has an effective base schedule, it doesn't matter what shift the agent is in until after the base schedule is no longer effective. Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

Create (generate) a week schedule

1. From the **Interaction Optimizer Home** page, in the Scheduling area click **Create schedule**. The **Create New Schedule** dialog box opens.
2. In the **Select a week to schedule** area, select the week for which you want to create a schedule. Use the left and right arrows to move between months.
3. In the **Select a forecast** area, select a forecast on which to base the new schedule. An AI-powered forecast must be in **Complete** status to appear in Select a forecast area.
4. In the **Schedule name** box, type a unique name for the schedule.
5. In the **Schedule Type** box, select **Local Scheduling** or **AI-Powered Scheduling**.

Select **Local Scheduling** to use traditional scheduling available in Interaction Optimizer. If you do not have licensing for AI-powered scheduling, the default is **Local Scheduling**.

Select **AI-Powered Scheduling** to use AI-powered cloud-based scheduling. AI-powered scheduling requires additional licensing and configuration, see [PureConnect AI-Powered Workforce Management Technical Reference](#).

6. (Optional) Select **Filters file (optional)**. You cannot select this option if you selected to use AI-powered scheduling.
7. To enable schedule preferences when available, click **Enable schedule preferences when available**.
8. Click **OK**.

For a local schedule, the **Generating schedule** dialog box opens. It displays a status messages as the schedule generation progresses.

For an AI-powered schedule, the schedule is submitted to the scheduling service for processing. The **Status** column in the **Schedules** tab displays the progress.

9. When the schedule is complete, do any of the following:
 - To view local schedule generation details, expand the desired nodes.
 - To save local schedule information for diagnostic and support purposes, click the **Save Support Log** button and save the file to the desired location.
 - To open and view the new schedule, click **Open schedule**. AI-powered schedule must be in **Complete** status before you can open and view the schedule.

Edit Base Schedule

The system creates a base schedule when agent bids are processed. You can change the base schedule for an agent so the changes are reflected in the schedules that are generated in subsequent weeks for the time period the base schedule is effective. The schedule has to be validated when changes are made to ensure subsequent weekly schedules can be generated. The base schedule shows the daily constraints for the entire week and allows you to make changes to any activity or the entire shift. For example, if an agent has a 9-5 shift Monday through Friday and now needs to leave at 3:30 on Wednesdays, you can change the Wednesday shift to end at 3:30. As a result, you won't have to change the schedule each week it's generated.

Note: Only one base schedule can be in effect at any given time.

The Base Schedule Editor is designed for basic edits only. If you need to make major changes to an agent's base schedule, such as adding and removing activities or changing the days of the week, then you should do that in the main schedule editor. You can pick one specific week to edit and make the entire seven days exactly what you want the agent to have for a base schedule. Then you can right-click on that agent and click **Create Base Schedule** to use that one week as the basis for the new base schedule. You will set the effective dates as needed and overwrite any existing base schedules that were previously used during that date range.

Notes:

You cannot create a new activity that starts before the current time.

You cannot copy a shift from one user to another on the current day.

When a new activity is created on the current day, and a shift does not exist for that activity, the shift should start at the time of the new activity start time and not before or after the new activity.

For changes that affect a single week, edit the schedule for that week. For longer term changes, edit the existing base schedule that is in effect for the time range desired.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home](#) page **Scheduling unit** drop-down list.

Edit a base schedule for an agent

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. In the Agent area, right-click the agent and select **Edit Base Schedule** from the menu that appears. The **Edit Base Schedule** dialog opens. You will be editing the base schedule for that week, but it may also be used for many other weeks. Double-check the starting and ending week date range.

Note: If there is no base schedule that is effective during the week of the weekly schedule you started with, a message appears, asking if you want to create a new base schedule from the existing weekly schedule. Click **Yes** to continue.

3. To modify the schedule date range, in the top section of the dialog box, do the following:
 - a. In the **Starting week of** box, type or select a new schedule start date.
 - b. In the **Ending week of** box, type or select a new ending week for the schedule, or, clear the check box so the schedule does not have an end date. Schedules without an end date continue indefinitely. The **Existing base schedule** box lists, for this agent, all the existing base schedules that will be replaced with this revised base schedule.
 - c. To see the existing base schedules in calendar view, click **View calendar**. The highlighted dates indicate the existing base schedule dates.
4. In the data grid, click the activity. In the bottom section of the dialog box, the **Activity Settings** for that activity are made available for edit.
5. To move an activity, in the data grid, click the **Activity** and drag and drop it to the desired location.
6. To change the start time for an activity, do one of the following:
 - In the data grid, click the **Activity** and drag it to the earliest time the activity can start.
 - In the bottom section of the dialog box, in the Earliest start time box, type or select the earliest time the activity can start.
7. To change the activity length, do one of the following:
 - In the data grid, click the right edge of the **Activity** and drag it to set the desired time you want the activity to last.
 - In the bottom section of the dialog box, in the **Length** box, type or select the amount of time you want the activity to last.

8. To change the time increment for the activity, in the **Increment** box, type or select the amount of time to add to the Earliest start time to get the next possible activity start time. For example, if you have an earliest start time of 11:00am, a latest start time of 12:00pm, and a start time increment of 30 minutes, your possible start times for the activity are: 11:00 a.m., 11:30 a.m., and 12:00 p.m.
9. To move all activities in the shift forward or backward a specific amount of time, do the following:
 - a. In the data grid, right-click the **Activity** and then click **Move entire shift...** The Move All Activities in Shift dialog box appears.
 - b. Click the direction to move the shift and then, in the **Time** box, select the amount of time to move all activities in the shift.
 - c. Click **OK** to close the dialog box and save your changes. The data grid reflects your changes.
10. To save your changes, in the Edit Base Schedule dialog box, click **Apply** or **OK**.

Note: You cannot edit an ACD activity to make it have different possible start times or increment values. The only time you can change an ACD activity is to make the first ACD start earlier or make the last ACD stop later. This change is effectively increasing or decreasing the start and end time for the shift. When you move the start time of an ACD activity that touches some other activity, you are basically changing the other activity and the ACD will fill in all the time during the shift that isn't covered by other activities.

Tip: In the data grid, an activity that doesn't have a solid highlight indicates changes to that activity haven't been saved. In step 3, see the Meal activity for Tuesday as an example.

Create a base schedule for an agent

1. From the [Interaction Optimizer Home page](#), click **Schedules**.
2. In the **Schedules** drop-down list, select the schedule you want to edit and click the **Open selected schedule** link. The selected schedule opens.
3. In the view, right-click the agent and then click **Create Base Schedule** from the menu that appears. The **Create Base Schedule** dialog opens.

Note: You can make the same changes as when editing a base schedule.

4. To adjust the ACD start time, in the data grid, click the left edge of the **ACD** box and drag it to the desired start time.
5. To adjust the ACD end time, in the data grid, click the right edge of the **ACD** box and drag it to the desired end time.

Modify Activity Details

You can modify activities in a schedule.

Modify activity details

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. In the view, double-click an activity to edit it. The **Modify Activity Details** dialog appears.
3. You can modify the following information as needed:
 - **Activity type:** The type of shift activity.
 - **Length:** The length of time the activity lasts.
 - **Start time:** The time the activity starts.
 - **Description:** A description of the activity.
 - **Counts as paid time:** Select this check box if the activity counts toward paid time.
 - **Counts toward contiguous work time:** Select this check box if the activity counts towards contiguous work time.
 - **Force time values to the nearest 15 minutes:** When selected, this option rounds the start time and length to the nearest 15 minutes. For example, if you have a start time of 11:04 and a length of 29 minutes, it will round the activity times to 11:00 to 11:30.

View the Base Schedule Editor Calendar

You can view a calendar that shows the schedule dates for existing base schedules to which an agent is assigned.

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

View the calendar for a base schedule

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the **Schedules** drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. In the view, right-click the agent and select **Edit Base Schedule** from the menu that appears. The **Edit Base Schedule** dialog opens. You will be editing the base schedule for that week, but it may also be used for many other weeks. Double-check the starting and ending week date range.
3. In the top section of the dialog box, click the **View calendar** link. The **Existing Base Schedule Effective Dates** dialog box appears. The agent has base schedules that are effective for all of the days highlighted in blue.

Rename a Schedule

You can rename a schedule from the Schedules tab.

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

Rename a schedule

1. From the [Interaction Optimizer Home page](#), in the **Scheduling** area click the **Schedules** link. The [Schedules grid](#) opens.
2. Select the schedule you want to rename and click the [Rename](#) button. The **Rename Schedule** dialog box opens.
3. In the **Schedule name** field, type an updated name for the schedule and click **OK**.

Manage schedules and schedule data

Interaction Optimizer offers many ways to manage your schedules and schedule data, including:

- [View actual work and RTA exceptions](#)
- [Change the forecast associated with a schedule](#)
- [Edit RTA exception details](#)
- [View analysis and summary counts area](#)
- [Use Reforecasting in Scheduling](#)
- [Export data](#)
- [Export coverage to Excel](#)
- [Display graphs](#)
- [View the Status Bar](#)
- [Use filter and sort options](#)

Synchronize time off requests and time off activities

In the Differences Between Time Off Activities and Time Off Requests dialog box, in the Automatic Fix column Optimizer presents a default fix for each difference. This fix is applied automatically when you select Apply Checked.

Note: The request value is always used, since changes to requests should be done in the time off requests view and then applied to the scheduled time off activities.

To review the differences between time off activities and time off requests:

1. From the Optimizer Home page, open a selected schedule.
2. Open the Interaction Optimizer menu and select **Show Differences in Time Off Requests**. The Differences Between Time Off Activities and Time Off Requests dialog box opens.

Note: The scheduled time off activities shown in this dialog box either differ from the associated time off requests, or do not have a backing time off request.

3. To apply the automatic fix to all differences, make sure all boxes in the Checked column are selected and click **Apply Checked**.
4. To apply the automatic fix to only certain differences, clear the check boxes for the differences you do not want to fix and then click **Apply Checked**.
5. To analyze a scheduled time off activity in the schedule, click the **View selected activity in schedule** link.
6. To manage a scheduled time off request, click the **View selected request in time off view** link.
7. To refresh the dialog box, click **Reload differences**.

View actual work and RTA exceptions

You can view the actual activities and status of each agent, and view any out of adherence events (RTA exceptions) in a current schedule or a past schedule. The **Actual Work** and **RTA Exceptions** rows are displayed under each agent in the [agent information area](#).

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home page Scheduling unit** drop-down list.

1. From the [Interaction Optimizer Home page](#), in the Scheduling area in the **Schedules** drop-down list select the appropriate schedule and click **Open selected schedule**. The selected **Schedule** tab opens.
2. Click the  icon under the agent's name to expand the rows. The **Actual Work** and **RTA Exception** rows may appear like this:

RTA Exception rows show the times when the agent's **Actual Work** did not match the scheduled work. Hover the mouse over each exception to view more details.

Actual Work rows show the activities that the agent performed during his or her shift. It also shows if the agent was not logged in to the system, indicated by horizontal, dashed lines.

3. Do one of the following:
 - [Excuse](#) an RTA exception
 - Press **F5** to reload Actual Work and RTA Exceptions data from the database and refresh the scheduled data from the cache.

Note: The behavior of changes made to RTA Exceptions is different from the behavior of changes made to scheduled activities. Any change to an RTA Exception is written (saved) to the database immediately, and is visible to other users. Any change to the schedule is cached (temporarily queued), and is not saved to the database until **Save** or **Publish** is clicked.

Also, when **Refresh** is selected or **F5** is clicked, RTA Exceptions and Actual Work is reloaded from the database, whereas scheduled activities are only reloaded from the temporary queue. The behavior difference enables evaluation of activity modifications (how those changes will affect the schedule), until the best possible schedule is achieved before publishing. Actual Work and RTA Exceptions continually change throughout a given day.

Change the forecast associated with a schedule

Note: You cannot change the forecast for an [AI-powered schedule](#).

When you create schedules many weeks in advance, the volume forecast you used in schedule creation may not be as accurate as a volume forecast you created at a later date. You can use the Change Volume Forecast feature to pick a new forecast and update the selected schedule with a head count that matches the new volume forecast.

1. From the **Interaction Optimizer Home** page, in the Scheduling area click the arrow at the end of the Schedules drop-down list and choose the desired schedule.
2. Click **Open selected schedule**. The **Schedule** tab opens.
3. Open the **Interaction Optimizer** menu and choose **Change Volume Forecast**. The Change Forecast dialog box opens.

Note: In the **Select a forecast to associate with this schedule** area, notice that the currently used forecast contains a check mark in the Current Forecast column. Also notice that, in the Modified Date column, you can see the when each forecast was last updated.

4. In the **Forecast Name** area, click the new forecast you want to use. Optimizer changes the shading on the selected forecast.
5. Click **OK**. Optimizer updates the schedule and provides progress messages at the bottom of the Change Forecast dialog box.
6. When the update completes, in the **Forecast successfully changed** dialog box, click **OK**.
7. To confirm that the schedule uses the new forecast, do the following:
 - a. Open the **Change Volume Forecast** dialog box again, as described in step 2. The new forecast should now contain a check mark in the Current Forecast column.
 - b. Click **Cancel**.

Excuse RTA exceptions

You can excuse an RTA exception by accepting the exception or by editing the activity and time of the exception before updating the schedule.

Note: Previously, exceptions were calculated up until an hour in the past for the current week's schedule. This behavior is changed to make sure its available until current time. The schedule editor now displays up-to-date adherence exception data.

1. Right-click an exception in the schedule. From the menu select **Excuse with default values** or **Excuse with single exception**.
2. Select **Excuse with default values** to accept the exception and update the schedule with the time and activity as shown by the exception.

OR

Select **Excuse with single exception** to edit the time and activity before updating the schedule. The **Edit Adherence Exception** dialog box appears.

Minutes to excuse - Enter the number of minutes to excuse

Activity - Select an activity for the time period to excuse.

Notes - Add comments for the exception.

Click **OK** to save changes and update the schedule. Any time remaining on the original exception still appears on the schedule.

Note: The behavior of changes made to RTA exceptions is different from the behavior of changes made to scheduled activities. Any change to an RTA exception is written (saved) to the database immediately, and is visible to other users. Any change to the schedule is cached (temporarily queued), and is not saved to the database until **Save** or **Publish** is clicked.

Also, when **Refresh** is selected or **F5** is clicked, RTA exceptions and Actual Work is reloaded from the database, whereas scheduled activities are only reloaded from the temporary queue. The behavior difference enables evaluation of activity modifications (how those changes will affect the schedule), until the best possible schedule is achieved before publishing. Actual Work and RTA exceptions continually change throughout a given day.

View analysis and summary counts

The area located below the schedule, displays counts and other information, depending on the selection in the pull-down list at the top left. Information displayed also depends on the view mode of the current schedule.

In the day and multi-day views, you can see [Scheduled and Forecast](#), [Activity Counts](#), [Expected Service Level](#), [Expected ASA](#), and [Expected Occupancy](#). In the week view, you can see [Weekly Counts](#).

Scheduled and Forecast

The **Scheduled and Forecast** information includes the following rows:

- The **Scheduled** row shows how many agents have an ACD activity type during that time period (15 minute interval).

- The **Forecast (with shrinkage)** row shows the number of full time-equivalent agents that were forecast during that time period. This value is the total of all route groups' forecast values for the time period, and includes shrinkage.
- The **Difference (with shrinkage)** row shows difference between the **Scheduled** row and the **Forecast (with shrinkage)** row, and includes shrinkage.
- The **Forecast (without shrinkage)** row shows the number of full time-equivalent (FTE) agents that were forecast during that time period. This value is the total of all route groups' forecast values for the time period, and does not include shrinkage.
- The **Difference (without shrinkage)** row shows difference between the **Scheduled** row and the **Forecast (with shrinkage)** row, and does not include shrinkage.
- The **Reforecast (without shrinkage)** row shows the number of agents that are reforecast to be needed at each interval throughout the day.

If you have turned off automatic reforecasting, then only times that are after the last time a reforecast was run will have values. If you run a second reforecast manually, then the intervals from the time of the second reforecast until the end of the day will be from the *second* reforecast, and the intervals with values from before that reforecast will be from the *first* reforecast.

For example, a manual reforecast is done at 9:45am and 1:20pm, it is using 30 minute intervals, and it has interactions until 6:00pm. Based on that, the reforecast row will have values from 9:30am to 6:00pm since the first reforecast creates values for any interval that hasn't been completed. The intervals from 9:30am to 1:00pm will be from the first reforecast, and the intervals from 1:00pm to 6:00pm will be from the second reforecast. Each reforecast overwrites the last reforecast's values because there is more information available about the day and the trends that have developed, which makes the most recent reforecast more accurate for the times later in the day.

If you have turned on automatic reforecasting, then all the times for the current day after the time ICBM was started will have values. The reforecast will run automatically every fixed amount of time (refresh frequency) as configured in [Configure Reforecast Settings](#). This default value is every 30 minutes, and it can be changed as needed. The reforecast will use all the latest data from within the sliding window and will run immediately prior to the Intraday Monitoring data being refreshed. Each reforecast overwrites the last reforecast's values because there is more information available about the day and the trends that have developed, which makes the most recent reforecast more accurate for the times later in the day. If IC Business Manager application is left open for multiple days, then the reforecast values from previous days will still be shown.

- The **Reforecast difference** row shows the difference between the **Scheduled** row and the **Reforecast (without shrinkage)** row, and does not include shrinkage.

Note: Both the **Reforecast (without shrinkage)** and **Reforecast difference** rows show correct values when filtering is applied to a schedule. Therefore, a schedule can be filtered based on a combination of workgroup, interaction type, and/or skill set, and the reforecast values will still be accurate.

Activity Counts

The **Activity Counts** information includes all possible activities with the number of FTE agents in that activity during each time period. The background color for each row is the same color as the [activity type's default background color](#).

Expected Service Level

The **Expected Service Level** information shows the service level that is expected for each workgroup (each workgroup is a row) in the scheduling unit.

Note: If there are no scheduled agents or no forecast needs for agents during some time periods of the day, then those time periods are not included in the cumulative service levels.

- The expected service level is calculated using Erlang-C based on the number of FTE agents that should be working in each workgroup during each time interval, along with the forecast number of agents for all the route groups that are part of that workgroup. The number of FTEs is calculated using the [coverage estimation algorithm](#).

Note: The expected service level is calculated assuming there is no shrinkage, so these values are often going to be higher than the real service level when there is shrinkage.

- Right-click on the workgroup to select the type of information to view; **Cumulative**, **By time period**, or both types. **By time period** calculates the expected service level for each 15 minute or 30 minute interval that is visible in the schedule grid. **Cumulative** calculates what the service level will be for the entire shift, starting from the earliest time visible in the schedule grid up to and including, the time period shown in the column header. For example, if a schedule being viewed covers 8:00 am to 1:00 pm, then the *cumulative* service level shown at 9:00 am includes the service level from 8:00 am to 9:15 am. Adjust the grid to see the *cumulative* service level for an overnight shift.
- A tooltip showing the number of seconds used for the service level objective is displayed on mouse-over or hover of the workgroup name.

Expected ASA

The expected ASA information shows the average speed of answer (ASA) in seconds for each workgroup in the scheduling unit.

Note: If there are no scheduled agents or no forecast needs for agents during some time periods of the day, then those time periods are not included in the cumulative ASA levels.

- The expected ASA value is calculated using Erlang-C with the same variables as the expected service level.

Note: The expected service level is calculated assuming there is no shrinkage, so these values are often going to be higher than the real service level when there is shrinkage.

- Right-click on the workgroup to select the type of information to view; **Cumulative**, **By time period**, or both types. **By time period** calculates the expected ASA for each 15 minute or 30 minute interval that is visible in the schedule grid. **Cumulative** calculates what the ASA will be for the entire shift, starting from the earliest time visible in the schedule grid up to and including, the time period shown in the column header. For example, if a schedule being viewed covers 8:00 am to 1:00 pm, then the *cumulative* ASA shown at 9:00 am includes the ASA from 8:00 am to 9:15 am. Adjust the grid to see the *cumulative* ASA for an overnight shift.

Expected Occupancy

The **Expected Occupancy** information shows the percentage of time that all the agents for each workgroup in the scheduling unit are expected to either be, handling interactions or doing after call work.

Note: If there are no scheduled agents or no forecast needs for agents during some time periods of the day, then those time periods will not be included in the cumulative occupancy.

- The expected occupancy value is calculated using Erlang-C with the same variables as the expected service level.
- Right-click on the workgroup to select the type of information to view; **Cumulative**, **By time period**, or both types. **By time period** calculates the expected occupancy for each 15 minute or 30 minute interval that is visible in the schedule grid. **Cumulative** calculates what the occupancy will be for the entire shift, starting from the earliest time visible in the schedule grid up to and including, the time period shown in the column header. For example, if a schedule being viewed covers 8:00 am to 1:00 pm, then the *cumulative* occupancy shown at 9:00 am includes the service level from 8:00 am to 9:15 am. Adjust the grid to see the *cumulative* occupancy for an overnight shift.

Note: In order to populate Occupancy by Day, the "Forecast service level by service goal group", should be selected in the Schedules screen's dropdown.

Weekly Counts

The **Weekly Counts** information shows the totals for the week. The total number of agents in a shift, the number of paid hours, and the number of total hours for each day are shown.

Note: The rows that are displayed in the above information areas can be changed by right-clicking a row name, and selecting the desired row names from the resulting menu (the options on the menu changes based on the information area). The rows that are last selected to be displayed are saved when IC Business Manager is closed then reopened.

The data from all of the analysis and summary count tabs can be copied by selecting the desired cells of data, press **Ctrl+C**, and then pasting (**Ctrl+V**) the selection in another application, such as Microsoft Excel.

You can manually configure reforecasting to run request in Scheduling.

1. Do one of the following:

- Under the **Scheduling** pane button, click a schedule, then from the **Actions** menu, select **Reforecast....**
- Click **Reforecast** on the toolbar

2. Do any of the following:

- View the current configured service levels. The Service Level (under **Goals for entire day**) defaults to the value for the service level of that workgroup.
- Override currently configured service levels by selecting the associated **Override** checkbox(es).

Note: You may decide to override the configured service level or ASA to adjust the interactions actually occurring that day. When you make this change, the dialog box shows what service levels are needed for the rest of the day. This information is based on the current total interactions for the day, and the reforecast number of interactions expected for the remaining part of the day.

For example, even though a workgroup normally handles interactions with a service level of 85% within 30 seconds, there could be a very high volume day where this service level is not attainable. You may notice that the morning service level for that workgroup is under 80% and decide that it would be acceptable to get a service level of at least 82% within 30 seconds for the day. When you make this adjustment, the dialog box may show that the needed future service levels for the rest of the day are 89% within 30 seconds, so that the overall service level for the day is 82% within 30 seconds.

Service levels overrides impact only to specific workgroups where the override is made. Uncheck the **Override** checkbox to return to and use the original values.

3. Click **Restore Defaults** to restore the defaults for the Reforecast Settings dialog box. Click **Clear Forecast Overrides** on the **Actions** menu to restore both the defaults for the **Reforecast Settings** dialog box *and* the **Advanced Reforecast Settings** dialog box.
4. Change columns that are displayed by right-clicking on any column header. Service levels and service level objectives (labeled Objective) are displayed if forecasting is based on service level, ASA is displayed if forecasting is based on ASA. The service level or ASA data is visible in the **Values up to the current time**, the **Needed future values** and the **Goals for the entire day** columns defined as follows:
- **Values up to the current time:** Value that the service level has been starting at the earliest time when interactions started on the current day up to the last recorded interval.
 - **Needed future values:** Shows what service level (or ASA) must be hit for the next interval all the way to the end of the forecast intervals for the current day in order to meet the **Goals for the entire day** value. This value is recalculated every time the **Goals for the entire day** are changed.
5. Click **Advanced** to configure more reforecast options, or click **Restore defaults** to discard any changes and return to the original settings.
6. Click **OK** when finished.

Note: The status bar in the lower left-hand side of the application displays a message saying either "Reforecasting using defaults" or "Reforecasting using overrides". When the status is "Reforecasting using defaults", then neither the reforecast settings nor the advanced reforecast settings have any overridden values. When the status is "Reforecasting using overrides", then there is one or more values from the reforecast settings or advanced reforecast settings that has been overridden. The tooltip on hover displays the most recent reforecast time.

Export data

You can use the export feature to port the current schedule into an HTML file (stored in the temporary directory of the local machine) and view the data in Internet Explorer. The data exported depends on the selected export option (see below), and on the [timespan settings](#) in the **Export** tab of the [Schedule Display Options dialog box](#). The file can be saved to another location and renamed for future use. The export options are:

- **Export All** - This option exports both the schedule data and the analysis and summary counts area. The default file name is "ScheduleAndTotalsInfo.htm".
- **Export Schedule** - This option exports the schedule data without the analysis data. The default file name is "ScheduleInfo.htm".
- **Export Totals** - This option exports the analysis and summary counts area without the schedule data. The default file name is "TotalsInfo.htm".

Export all

1. On the **Interaction Optimizer** toolbar, select [Export All to HTML](#).
2. View the export data in Internet Explorer. Totals displayed depends on the totals that are in the current view of the schedule when export is performed.

Export the schedule

1. On the **Interaction Optimizer** menu, select **Export Schedule to HTML**.
2. View the export data in Internet Explorer.

Export totals

1. On the **Interaction Optimizer** menu, select **Export Totals to HTML**.
2. View the exported data in Internet Explorer. Totals displayed depends on the totals that are in the current view of the schedule when export is performed.

Note: If the schedule is in the day or multi-day view when exported, then all activities from the time period are shown. If the schedule is in the week view when exported, then all shifts from the time period are shown. Again, the time period depends on the [timespan settings](#) in the **Export** tab of the **Schedule Display Options** dialog box.

Export coverage to Excel

You can use the Export Coverage to Excel feature to port the current schedule or forecast per route group for each interval into an Excell file. The file can be saved to another location and renamed for future use.

1. On the **Interaction Optimizer** menu, select **Export Coverage to Excel**.
2. Save the file to the desired location.

Display graphs

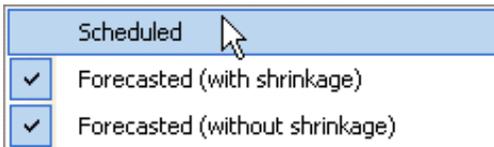
You can view the scheduled and forecast counts data in graph format. The graph is based on all data in a schedule and does not recognize filter settings. Choose from 2-dimensional or 3-dimensional views. Graphs are available in day and multi-day views.

Note: Before you configure shifts, select the appropriate scheduling unit from the **Interaction Optimizer Home page Scheduling unit** drop-down list.

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the appropriate schedule from the Schedules drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. On the **Interaction Optimizer** toolbar, select **Graphs**.
3. View the schedule data in the displayed graph.
4. Do any of the following:
 - Use the up and down arrows to adjust the **Start Time** and the **End Time**.
 - Change the graph view by clicking on the graph type buttons. The default view is 2-dimensional line chart.



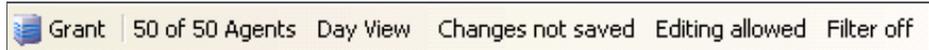
- Right-click in the graph and select which rows to include or exclude.



Tip: When viewing a 3-dimensional graph, click and hold [Alt] while moving the mouse to rotate the graph.

View the Status Bar

The status bar displays the CIC server, the number of agents, view mode, changes not saved, editing status, and filter options that are associated with the schedule in the workspace.



CIC Server: This is the name of the CIC server that Interaction Optimizer Administrator is connected to.

Number of Agents: This is the number of filtered agents out of the total number of scheduled agents for the schedule.

View Mode: This is the type of schedule view currently being shown.

Changes Not Saved: This indicates if any changes have been made since the last save, or since the schedule was opened.

Editing Status: This indicates whether the schedule is opened in read-only or if editing is allowed.

Filter Options: This indicates whether the filter is on or if it is off. If the filter is on, then on hover or mouse-over over the status, a tooltip with the filter details is displayed.

Use filter and sort options

The filter criteria allow the user to only view agent schedules that match certain requirements.

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home page Scheduling unit** drop-down list.

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the appropriate schedule from the Schedules drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. On the **Interaction Optimizer** toolbar, click [Filter and Sort Options](#).
3. In the **Filter and Sort Options** dialog box, set any of the following in the **Filter Criteria** section:
 - **Workgroup:** Select the workgroup from the pull-down list that you want to limit the view to in the schedule. Only one workgroup can be selected, otherwise all <ALL> (default setting) workgroups are included. The workgroups available are the workgroups that are included in the scheduling unit from which the schedule is generated.
 - **Interaction Type:** Select the interaction type from the pull-down list that you want to limit the view to in the schedule. Only one type can be selected, otherwise all <ALL> (default setting) interaction types are included.
 - **Skill Set:** Select the skill set from the pull-down list that you want to limit the view to in the schedule. Only one skill set can be selected, otherwise all <ALL> (default setting) skill sets are included. The skill sets available are all the skill sets that are recorded in the volume or headcount forecasts used for this schedule.
 - **Shift:** Select the shift from the pull-down list that you want to limit the view to in the schedule. Only one shift can be selected, otherwise all <ALL> (default setting) shifts are included. The shifts available are the shifts which are defined for the scheduling unit from which the schedule was generated. If any shift other than <ALL> is chosen, then only the Scheduled row is displayed in the [Scheduled and forecast](#) information.
4. Select the sort order from the **Sort Order** pull-down list that you want the schedule data to sort by. The sort order determines the order that the agents will be shown on the schedule. Some sort order options have the same affect as clicking one of the column headers in the [agent information area](#). The direction of the arrow in the column header, indicates the sort order; ascending or descending (shown).



When finished setting the filter and sort options, click **OK**. The selected settings are applied to the schedule.

Tip: To quickly return to the default filter and sort options, click **Reset Filter**.

Schedule Bidding Overview

Note: [AI-powered schedules](#) are not available to schedule bidding.

Schedule bidding is a common practice in contact centers that allows administrators to assign work schedules to agents using a variety of methods, including seniority, performance or a combination of methods. With the Agent Preferences feature, you can build schedules based on agent preferences. The order in which the schedules are built can be based on a number of criteria. The Schedule Bidding feature is designed to complement the Skills-Based Scheduling and Agent Preferences features to round out the scheduling capabilities of Interaction Optimizer. Administrators create schedule bids that are effective for a fixed or open-ended time period and that can be bid on during a specific bid window. Agents cannot see the possible schedules before the bid window is opened.

Notes:

Generating schedules on the CIC server can result in performance issues. We recommend you generate schedules on a client machine.

If no agents have the Enable Schedule Bidding check box selected, a message appears with the option to close the Schedule Bid wizard and open the Agent Groups view to give agents the right to bid on schedules.

Terms

- **Schedule:** A schedule is all the activities one agent performs in a week. For example, one schedule could have activities assigned from 8:00 AM to 4:30 PM on Monday through Friday.
- **Biddable Schedule:** A biddable schedule is one possible schedule for an agent.
- **Schedule Bid:** A schedule bid is a set of many biddable schedules. An agent submits a bid to be assigned his or her preferred schedule in this set of schedules.
- **Bidding window:** A bidding window is the interval during which bids are accepted for a Schedule Bid.
- **Effective dates:** The date range the schedule is in effect. If you don't specify an end date, the schedule is in effect indefinitely.
- **Base schedule:** A base schedule is a set of constraints used to create a fixed schedule for an agent for a given time period. A base schedule is used for one agent in a similar way that a shift is used for creating schedules for many agents. A base schedule is created when the schedule bid is processed, but it can also be created by using an existing weekly schedule for an agent.

Agent groups and priority ranking

Schedule Bidding uses the same agent group and priority ranking options as the Agent Preferences feature. Priority ranking allows supervisors to take into consideration a variety of criteria when determining the schedule assignment order within an agent group. You can specify up to 10 metrics that can be used for an overall ranking.

Schedule bidding configuration options

There are three options for generating schedules: Skills-based, preference-based, and schedule bidding. You determine which of the three options you would like to use for the next set of schedules. Once you select Schedule Bidding as the schedule generation process, you have the following capabilities:

- Specify the effective date for new schedules. You can make the schedule effective for a set period of time or leave the end date blank so the schedule remains in place indefinitely. Once the schedules are assigned to agents, the agents receive the same schedule every week until either the end date of the schedule set or until the next set of schedules is assigned.
- Specify start and end dates and times for the bid window. You can change the bid start date and time at any point prior to the start of the bid window. You can change the bid end date and time any time as long as the schedule bid has not been processed yet.
- Select specific agents within the agent group to include or exclude in the bidding process. You can include all or part of an agent group in a schedule bid.
- Generate schedules based on coverage. Optimizer builds the number of schedules necessary to attain the service level or Average Speed of Answer (ASA) goal based on the workgroup and agent group configuration, including any agent or shift definition restrictions.
- Create many schedule bids that only differ by a few input choices. Which means you could end up with many different numbers of biddable schedules for the same effective dates. At some point, you activate exactly one schedule bid for a specific starting effective date. Only this schedule bid is shown to agents during the bid window.
- Set a maximum number of shifts that can be assigned per agent group. For example, if you have 10 agents in agent group A, you could set a maximum of five agents to get Shift1 and five agents to get Shift2. For more information, see the Interaction Client online Help in the documentation library.

Agent interface to schedule bidding

Agents access schedule bidding through the Interaction Client. Agents gain access to the bidding options when the bidding window opens. While the schedule bidding window is open, agents can view and sort the schedules based on a number of criteria.

Agents rank their schedules from most to least preferred. The numbering scheme is based on a 1 as the highest preference and continues to their lowest preference based on the actual number of schedules available. Auto-ranking is also available and can be based on the same criteria on which the view/sort options were based. For example, if an agent selects the auto-rank for earliest to

latest and weekends off, the system ranks the earliest schedules with weekends off as the highest preference. Agents can make changes until the schedule bidding window closes.

Once the schedule bidding window closes, and you process the bids, Optimizer assigns the schedule to the agents. At this point, you can review the assignments and prepare for any negative sentiments from agents who didn't receive their preferred schedule.

Add a Schedule Bid

Note: [AI-powered schedules](#) are not available to schedule bidding.

You can add a schedule bid using the Schedule Bid Generation Wizard. The wizard provides a way to re-use a previous set of schedule bid parameters so you can create "what-if" scenarios before deciding on a schedule bid to use. Schedule bids can be a mix of bidding agents and non-bidding agents, as well as a combination of agent groups and shifts.

Note: Generating schedules on the CIC server can result in performance issues. We recommend you generate schedules on a client machine..

Add a new schedule bid

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click Create schedule bid.... The Schedule Bidding Inputs page of the Schedule Bid Generation Wizard appears.

Do one of the following:

- To specify your own inputs, click the **Specify inputs** radio button.
 - To import the information you entered and saved for a previously created biddable schedule, click **Use previous inputs**, click [Browse](#), navigate to the folder where the inputs are located, and click **Open**.
3. Click **Next**.

Note: If you chose to use previous inputs and you have no additional changes, click **Finish**. Interaction Optimizer generates the schedule bid.

4. If you chose to specify your own inputs, in the **Schedule Bidding Options** dialog box [specify the bidding options](#) and click **Next**.
5. In the **Schedule Bidding Times** dialog box, [select the bidding window and the effective schedule dates](#) and click **Next**.
6. In the **Schedule Bidding Agents** dialog box, [specify the agents for whom to create the schedule bid](#) and click **Next**.
7. In the **Schedule Bidding Shifts** dialog box, [specify the shifts to include in the schedule bid](#) and click **Next**.
8. In the **Schedule Bidding Minimums and Maximums** dialog box, [specify the number of shift occurrences for each shift](#) to be generated for the schedule bid and click **Finish**. Interaction Optimizer generates the schedule bid.

Refresh the screen

In the Interaction Optimizer toolbar, click the [Refresh](#) button.

Schedule Bidding Options

You can specify a name and head count forecast for a schedule bid using the Schedule Bid Generation Wizard. The **Schedule Bidding Options** page appears after you click **Next** on the **Schedule Bidding Inputs** page of the wizard.

1. In the **Schedule bid name** box, type a name for the schedule bid.
2. If desired, use the filters to only display specific head count forecasts.
3. Click the head count forecast to use as the coverage requirements for the schedule bid.
4. To allow non-bidding agents to specify schedule preferences, click **Enable schedule preferences when available for non-bidding agents**.
5. Click **Next**. The **Schedule Bidding Times** page of the wizard appears.

Schedule Bidding Times

You can specify the schedule bidding times and date range the schedule is effective using the **Schedule Bid Generation Wizard**. The **Schedule Bidding Times** page appears after you click **Next** on the **Schedule Bidding Options** page of the wizard.

1. In the **Bidding window** section, select the date and time the bid window begins and ends. The agent receives notification in the Interaction Client when bidding is open.
2. In the **Effective schedule dates** section, select the date the schedule starts and, if desired, the date the schedule ends. If you don't specify an end date, the schedule is in effect indefinitely.
3. Click **Next**. The **Schedule Bidding Agents** page of the wizard appears.

Schedule Bidding Agents

You can specify the agents for whom to create the schedule bid using the **Schedule Bid Generation Wizard**. The **Schedule Bidding Agents** page appears after you click **Next** on the **Schedule Bidding Times** page of the wizard.

1. In the list box, click an option to indicate the agents to whom the schedule bid is available. The options are defined as follows:
 - **Create biddable schedules for all the agents configured to be a part of a schedule bid:** The schedule is available to all agents, regardless of which ones are selected in the list. The schedule is also available to all agents in the agent groups for which schedule bidding has been enabled. This option is the one you use the majority of the time.
 - **Create biddable schedules for only the selected agents:** The schedule is only available to the agents selected in the list. Select and clear the check boxes as necessary. You typically use this option when new agents were added to an agent group after a schedule bid was already completed for the same time period. For example, you have 100 agents that bid for the first quarter schedules during November. These schedules are assigned to the agents and you realize that you need 5 more agents to meet your service level goals so you hire/train 5 more agents. You run another schedule bid for the first quarter with a bid window in December so the 5 new agents can bid on the schedules that will be added to the 100 agents who already have schedules.
 - **Create biddable schedules for all except the selected agents:** The schedule is available to all agents except the ones selected in the list. Select and clear the check boxes as necessary. You typically use this option to exclude agents who have fixed schedules and don't need to bid. For example, say that you have 2 agents who will be doing a lot of training during the next quarter and they have to work from 8:00am to 5:00pm for their training. You can exclude them from the bid for the next quarter, and still keep them in the agent group.
2. Click **Next**. The **Schedule Bidding Shifts** page of the wizard appears.

Schedule Bidding Shifts

You can specify the shifts to include in the schedule bid using the **Schedule Bid Generation Wizard**. The **Schedule Bidding Shifts** page appears after you click **Next** on the **Schedule Bidding Agents** page of the wizard.

1. If desired, use the filters to only display specific shifts.
2. In the **Included** column, click which shifts to include in the schedule bid.
3. Click **Next**. The **Schedule Bidding Minimums and Maximums** page of the wizard appears.

Schedule Bidding Minimums and Maximums

You can specify the number of shift occurrences for each shift to be generated for the schedule bid using the **Schedule Bid Generation Wizard**. The **Schedule Bidding Minimums and Maximums** page appears after you click **Next** on the **Schedule Bidding Shifts** page of the wizard.

For each agent group listed in a column, the scheduling engine will generate some number of shifts of the type of shift listed in the "Shift Name" column. For example, if you set the **Min** to 15 and the **Max** to 20 for the "Agent Group 1" column and the "Floating" shift row, the scheduling engine will generate at least 15 and at most 20 Floating shifts to be given to agents in the "Agent Group 1" agent group. Whenever **Min** and **Max** are exactly the same, that exact number of shifts will be generated for that agent group/shift combination. Note that the number in parentheses after the agent group name is the number of agents that have been included in this schedule bid and that belong to that agent group. If there are multiple shifts, make sure that the total of all the **Max** values in one agent group column is equal to or greater than the number of agents included in the schedule bid.

1. To change the minimum agents available for a shift and agent group, in the **min** box, type a number or click an arrow to increase or decrease the value.
2. To change the maximum agents available for a shift and agent group, in the **max** box, type a number or click an arrow to increase or decrease the value.
3. To change the overall minimum number of biddable schedules, select **Minimum biddable schedules** and type or select the desired value.
4. To change the overall maximum number of biddable schedules, select **Maximum biddable schedules** and type or select the desired value.

Here's an example of how you might determine the overall maximum number of biddable schedules to use. Let's say you determined how many 8x5 shifts and how many 4x10 shifts to use in order to get a more efficient schedule bid. In order to give the scheduling engine more flexibility, you might have a large difference between **Min** and **Max** for all the shifts and agent group combinations. However, if you don't want the total number of schedule bids created to exceed the number of agents, you could set the **Maximum biddable schedules** value to the number of agents in the scheduling unit.

5. Click **Finish**. The **Schedule Generation** dialog box appears.

Schedule and Schedule Bid Generation

The **Schedule Generation** page appears when you select **OK** from the **Create New Schedule** dialog. The **Schedule Bid Generation** page appears after you click **Finish** on the **Schedule Bidding Minimums and Maximums** page of the **Schedule Bid Generation Wizard**.

Beginning in 4.0 SU5, Interaction Optimizer includes an enhanced scheduling engine that more accurately schedules agents at optimal times. This new scheduler produces schedules that provide a higher service level when using the same number of agents for shifts flexible enough for this advanced algorithm. Because the new scheduling engine incorporates improved calculation features, it produces schedules at a much slower rate than in previous versions. In addition, the enhanced scheduling engine now supports [deferred work](#) when calculating schedules.

Note: You can generate a local schedule and continue working in Interaction Center Business Manager while Interaction Optimizer calculates the schedule. However, closing the tab or navigating to a different page within the same tab cancels the current schedule generation. You may freely open other tabs and work within them.

When you generate a schedule or schedule bid, Interaction Optimizer displays status messages as the schedule generation progresses, such as which agent is being evaluated, staff estimates, schedule considerations, and what step is currently being performed in the process.

When the schedule generation is complete, you can review any applicable details, warnings, or error messages associated with the schedule. You can also view the schedule immediately or save schedule information for diagnostic and support purposes.

From the **Schedule Generation** page, you can perform any of the following actions:

- To copy the schedule generation information to the clipboard, click **Copy information to clipboard**.
- To save the information you entered so you can troubleshoot or resolve scheduling issues, click **Save Support Log**.
- To view the schedule, click **Open Schedule**. The schedule appears in the view.

From the **Schedule Bid Generation** page, you can perform any of the following actions:

- To copy the schedule bid generation information to the clipboard, click **Copy information to clipboard**.
- To save the information you entered so you can import it when creating schedule bids in the future, click **Save Inputs**. This option saves you time if you want to do "what if" scenarios where you only change a few parameters and create many different schedule bids.
- To save the information you entered so you can troubleshoot or resolve schedule bidding issues, click **Save Support Log**.
- To view the schedule bid, click **Open Schedule Bid**. The schedule bid appears in the view.

Manage Schedule Bids

Typically, you create multiple schedule bids and then analyze them to determine the best one. You can view details such as schedule efficiency, and then make changes to the schedule bids until you have a suitable schedule bid. Once you select the single schedule bid you want to use for a particular effective date range, you must activate it. The bidding window does not open and agents cannot begin bidding until you activate a schedule bid.

Note: Generating schedules on the CIC server can result in performance issues. We recommend you generate schedules on a client machine.

You can make the following changes to a schedule bid:

1. Edit a schedule bid **only before the bid window opens**. If you want to get a schedule bid that is much different from the one generated, the best practice is to change the input parameters and create a new schedule bid, rather than making major edits.

Note: Use caution when editing a schedule bid. Any changes you make to a biddable schedule will impact the schedule's efficiency.

2. Move, edit, and delete activities within a daily schedule.
3. Move the entire daily schedule forward or backward.

You cannot perform any of the following activities:

- Modify anything in the week view, such as dragging daily schedules from one day or user to another.
- Swap daily schedules between agents.
- Edit non-biddable schedules.

The system opens the bid window on the date you specified for the schedule bid. While the bid window is open, agents access Interaction client to view the schedule bids, select the schedule they want, and then submit their bid. You can view the Agent Schedule Bids dialog box to see which agents have and have not submitted their bids. Then, for example, if it's getting close to time for the bid window to close, agents can be reminded to submit their bids.

Note: You can let the system open the bid window automatically on the specified date or you can open the bid window manually before the specified start date. However, opening the bid window manually is not common practice.

The system closes the bid window on the date you specified for the schedule bid. After the bid window closes, you notify the system to process the bids. The system then creates a base schedule for all the agents who were part of the schedule bid. After you select to process the bids, you cannot change the effective stop date and you cannot process the schedule bid a second time.

Note: You can let the system close the bid window automatically on the specified date or you can close the bid window manually before the specified end date. However, closing the bid window manually is not common practice.

Activate a Schedule Bid

Typically, you create multiple schedule bids and then analyze them to determine the best one. You can view details such as schedule efficiency, and then make changes to the schedule bids until you have a suitable schedule bid. Once you select the single schedule bid you want to use for a particular effective date range, you must activate it. The bidding window does not open and agents cannot begin bidding until you activate a schedule bid.

Note: Generating schedules on the CIC server can result in performance issues. We recommend you generate schedules on a client machine.

The system opens the bid window on the date you specified for the schedule bid. While the bid window is open, agents access Interaction client to view the schedule bids, select the schedule they want, and then submit their bid. You can view the Agent Schedule Bids dialog box to see which agents have and have not submitted their bids. Then, for example, if it's getting close to time for the bid window to close, agents can be reminded to submit their bids.

The system closes the bid window on the date you specified for the schedule bid. After the bid window closes, you notify the system to process the bids. The system then creates a base schedule for all the agents who were part of the schedule bid. After you select to process the bids, you cannot change the effective stop date and you cannot process the schedule bid a second time.

Activate a schedule bid

In the toolbar, click the [Activate for Effective Dates](#) button or, in the **Interaction Optimizer** menu, click **Activate for Effective Dates**. No schedule bids are used until they are activated. Schedule bids are not automatically activated because that would deactivate all the other schedule bids with the same effective start date.

Only one active schedule bid can exist with the same effective start date. Whenever one schedule bid is activated, the system deactivates any other schedule bids in the same scheduling unit that have exactly the same effective start date. However, it does not deactivate a schedule bid that may have an overlapping time period. For example, if you have one schedule bid that is effective January 1 to March 31 and another one that is effective February 1 to March 31, activating the first schedule bid does not deactivate the second schedule bid.

Whenever a schedule bid is processed, it creates base schedules for the effective time period. It overwrites any base schedules that overlap that time period. For example, if the second schedule bid mentioned previously was processed second, the base schedules from January 1 to January 31 are from the first schedule bid and the base schedules from February 1 to March 31 are from the second schedule bid.

Open and Close Schedule Bidding

The system opens the bid window on the date you specified for the schedule bid. While the bid window is open, agents access Interaction client to view the schedule bids, select the schedule they want, and then submit their bid. You can view the Agent Schedule Bids dialog box to see which agents have and have not submitted their bids. Then, for example, if it's getting close to time for the bid window to close, agents can be reminded to submit their bids.

Note: You can let the system open the bid window automatically on the specified date or you can open the bid window manually before the specified start date. However, opening the bid window manually is not common practice.

The system closes the bid window on the date you specified for the schedule bid. After the bid window closes, you notify the system to process the bids. The system then creates a base schedule for all the agents who were part of the schedule bid. After you select to process the bids, you cannot change the effective stop date and you cannot process the schedule bid a second time.

Note: You can let the system close the bid window automatically on the specified date or you can close the bid window manually before the specified end date. However, closing the bid window manually is not common practice.

Open bidding to the agents

If you want to start the bidding immediately, you can open the bid window prior to the scheduled start time. This option is enabled only if the schedule bid you are viewing is the active schedule bid for that effective start date and the current time is before the bid window start time. In the **Interaction Optimizer** menu, click **Schedule Bidding** and then click **Start Bidding Now**. The Bid Window Information dialog appears.XC

Close bidding to the agents assigned to the schedule bid

If you want to stop the bidding immediately, you can close the bid window prior to the scheduled stop time. This option is enabled only if the schedule bid you are viewing is the active schedule bid for that effective start date, the bid window has already started, and the current time is before the bid window stop time. While stopping bidding prior to the scheduled stop date is possible, there are consequences (for example, agents may not have submitted their bids). To see which agents have or have not submitted bids, see [Agent Schedule Bids](#).

1. In the **Interaction Optimizer** menu, click **Schedule Bidding** and then click **Stop Bidding Now**. The Bid Window Information dialog appears.
2. Click **Yes** to close bidding.

Note: If there are agents who haven't submitted a bid and you want to keep bidding open until they submit their bids, click **No**.

After you close the bid window, you can process the bids and then view the outcome of bidding.

View, Modify, and Delete Schedule Bids

After you create a schedule bid, you can access it from the Interaction Optimizer Home page, view schedule details, and rename the schedule bid. You can also delete obsolete schedule bids.

Access a schedule bid

From the [Interaction Optimizer Home page](#), in the Schedule Bids area select the appropriate schedule bid from the Schedule Bids drop-down list and click the Open selected schedule bid link. The selected schedule opens.

View details for a schedule bid

In the Interaction Optimizer menu, click **Schedule Bidding** and then click **Show Schedule Details**. The Schedule Details dialog appears. For more information, see [Schedule Details](#).

Rename a schedule bid

You can rename a schedule bid from the Schedule Bids tab.

Note: Before you configure settings, make sure you select **Schedule Bids** from the Scheduling area of the Interaction Optimizer Home page.

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the **Schedule Bids** link. The **Schedule Bids** tab opens.
2. Select the schedule you want to rename and click the [Rename](#) button. The **Rename Schedule Bid** dialog box opens.
3. In the **Schedule name** field, type an updated name for the schedule and click **OK**.

Delete a schedule bid

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click **Schedule Bids**.
2. Do one of the following:
 - Right-click the schedule bid name and then click **Delete selected schedule bid**.
 - Select the schedule bid name and then, in the Navigation Pane toolbar, click the [Delete](#) button.
3. In the **Delete Confirmation** dialog box, click **Yes**.

Change Schedule Bidding Times

You can change bidding times and the date range a schedule is effective before you process agent bids. If the bid window start time is in the future, you can change it to any time desired. If you change it to a time in the past, the bid start time is set to the current time. The bid window stop time can be changed to any time desired to allow you to close the bid window early if something is wrong with the bid or extend the bid window to allow more agents to complete their bids. You cannot change the effective start date for the schedule because the weekly schedule associated to the schedule bid is created for the first week the schedule bid is effective and all active bids are based on this week. You can change the effective end date or leave it open-ended.

Change schedule bidding times

1. From the [Interaction Optimizer Home page](#), in the Schedule Bids area select the appropriate schedule bid from the Schedule Bids drop-down list and click the **Open selected schedule bid** link. The selected schedule opens.
2. In the toolbar, click [Change Dates](#) or open the **Interaction Optimizer** menu, select **Schedule Bidding** and then click **Change Dates....** . The **Schedule Bidding Times** dialog box appears.
3. In the **Bidding window** section, select the date and time the bid window begins and ends and click **OK**.

View Agent Details

You can view detail information for an agent.

View agent details

1. From the [Interaction Optimizer Home page](#), in the **Schedule Bids** area select the appropriate schedule bid from the **Schedule Bids** drop-down list and click the **Open selected schedule bid** link. The selected schedule opens.
2. Right-click the agent and then click **Show Agent Details**. The **Agent Details** dialog appears.

View Agent Schedule Bids

You can view which agents have submitted bids and which have not for a specific schedule bid. View this dialog box before processing the bids to see if any agents haven't submitted their bid. If necessary, you can change the bid window end time to give an agent a little more time to bid. Also, if an agent disputes his or her schedule, you can use this dialog box to investigate the situation. For example, if the agent failed to submit a bid, the agent is assigned a random schedule after all the agents who did bid have been processed.

View agent bids

1. From the [Interaction Optimizer Home page](#), in the Schedule Bids area select the appropriate schedule bid from the **Schedule Bids** drop-down list and click the **Open selected schedule bid** link. The selected schedule opens.
2. In the **Interaction Optimizer** menu, click **Schedule Bidding** and then click **View Agent Bids**. The **Agent Schedule Bids** dialog appears.

Process a Schedule Bid

You can process agent bids for a schedule bid after the bid window closes. You can only process the bids once so make sure that all the agents have completed bidding before you process the bids. See [Agent Schedule Bids](#).

Note: Before you configure activities, select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Process a schedule bid

1. From the **Interaction Optimizer Home** page, in the Schedule Bids area select the appropriate schedule bid from the Schedule Bids drop-down list and click the **Open selected schedule bid** link. The selected schedule opens.
2. In the toolbar, click [Process Bids](#) or, in the **Interaction Optimizer** menu, click **Schedule Bidding** and then click **Process Bids...** The **Process Bids** dialog box appears.
3. Click **Start**. When processing is complete, a message appears indicating the bids were processed successfully.
4. Click **Finish**. The schedules are assigned to the bidding agents, base schedules are created for all the agents who "won" the biddable schedules, and a new weekly schedule is created for the first week in the effective time range.
5. Evaluate the newly created schedule, make any necessary changes, and publish it.
6. The first effective week's schedule is automatically created and can be accessed by clicking the **Open schedule** link. Subsequent week schedules for the remaining effective weeks must still be generated as you would do for 'normal' week schedule generation. That process looks for effective base schedules, then shift rotations, then shifts in order to determine constraints.

View Schedule Bid Details

You can view details for a schedule bid.

Schedule efficiency is the measurement of how closely the scheduled resources match the forecast number of resources needed. For example, if you need 10 agents, but you schedule 9 agents, the schedule efficiency for that interval would be 90%. Schedule efficiency is reduced if you over-schedule in the same way that it is reduced if you under-schedule. For example, if you schedule 11 agents when you need 10 agents, the schedule efficiency would be 90%.

The formula used to measure schedule efficiency is: $1 - (\text{absolute value}(\text{forecast} - \text{scheduled}) / \text{forecast})$

The [non-weighted] schedule efficiency shown in the Schedule Details dialog is the average schedule efficiency for all the intervals in the schedule where either the forecast or the scheduled value is non-zero. The weighted schedule efficiency shown in this dialog box factors how large the forecast is for each interval when determining the overall weighted schedule efficiency. For example, say you have two intervals. The first interval has a schedule efficiency of 50% and the forecast resource is 10. For the second interval, the schedule efficiency is 90% and the forecast resource is 100. The weighted schedule efficiency would be $(5 + 90) / 110 = 86.37\%$, but the non-weighted schedule efficiency would be $(50 + 90) / 200 = 70\%$.

The weighted schedule efficiency is calculated by multiplying the schedule efficiency in each interval by the forecast number of resources, adding up all these weighted numbers for all intervals where the forecast or scheduled value is non-zero, and then dividing by the total of all the forecast number of resources for all the intervals.

View schedule details

1. From the [Interaction Optimizer Home page](#), in the **Schedule Bids** area select the appropriate schedule bid from the Schedule Bids drop-down list and click the **Open selected schedule bid** link. The selected schedule opens.
2. In the **Interaction Optimizer** menu, click **Schedule Bidding** and then click **Show Schedule Details**. The **Schedule Details** dialog box appears.
3. To display information for a specific agent group, in the **agent group** box, click the agent group for which to display information.

Assign Schedule to Agent

You can assign an unassigned schedule bid to an available agent after you [process the schedule bid](#).

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

Assign a schedule to an agent

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select a schedule bid from the **Schedule Bids** drop-down list and click **Open selected schedule bid**. The selected schedule bid opens.
2. Right-click the agent and then click **Assign Schedule to Agent...** from the menu that appears. The **Assign Schedule to Agent** dialog box appears.
3. Click the name of the agent to assign to the schedule and then click **OK**. A base schedule is created for this agent that is effective for the time period specified in the original schedule bid.

Bid Outcome Statistics

You can view bid outcome statistics for a schedule bid to evaluate bidding results. The statistics show you the bidding choices (from first to last) and the number of agents who received that choice. The statistics show both the counts and percentages, and the cumulative levels so you can see how many agents were assigned a schedule within the top five choices. You can use this information to answer questions from agents as to why they didn't get their first schedule choice, for example.

View bid outcome statistics

1. From the [Interaction Optimizer Home page](#), in the Schedule Bids area select the appropriate schedule bid from the Schedule Bids drop-down list and click the **Open selected schedule bid** link. The selected schedule opens.
2. In the **Interaction Optimizer** menu, click **Schedule Bidding** and then click **View Bid Outcomes**. The **Bid Outcome Statistics** dialog appears.

Tip: To filter the information by agent group, in the **Agent group** box, click the agent group for which to display information.

Schedule Display Options

You can use the schedule display options to configure how your schedule looks. This section includes:

- [Activity Colors](#)
- [Display](#)
- [Messages](#)
- [Export](#)

Note: To view/edit the schedule, you must have the appropriate Scheduling Unit selected on the Interaction Optimizer Home page. In order to see the Actual Work and RTA Exceptions rows, you must have the "Optimizer Supervisor Plug-in" license.

Change Activity Colors

You can change the colors of the text and background for each activity type. You can also change the font.

Note: Before you configure activities, select the appropriate **Scheduling unit** from the **Interaction Optimizer Home** page.

Make changes to activity appearance

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. On the **Interaction Optimizer** toolbar, click [Display Options](#).
3. On the **Activity Colors** tab, select the checkbox(s) for the activity you want to change.
4. Do one or more of the following:
 - To change the background color, click **Choose back color...**, select the new background color, and click **OK**.
 - To change the font color, click **Choose font color...**, select the new font color, and click **OK**.
 - To change the font, click **Choose font...**, select the new font, font style, and size, then click **OK**.
5. To show individual activities of each day when in week view, rather than show the entire shift as one item, check the **Show all the activities in a shift in week view** check box.
6. When all changes are made, click **Apply** to apply to changes to the schedules, then click **OK**.

Tip: To return the display to the original settings, click **Restore Defaults**. To edit all activities at the same time, click **Check All**.

Change Display

You can change the size of rows and lines, and you can change the format of the activity name and display.

Changes the schedule's appearance

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule link**. The selected schedule opens.
2. On the **Interaction Optimizer** toolbar, click [Display Options](#).
3. On the **Display** tab in the **Size, rows and lines** section, change one or more of the following:
 - Use the up or down arrows to change the **Height of activity timebars in rows**. The default height is 15.
 - Use the up or down arrows to change the **Height of one row**. This determines the height of each row in the schedule. The value should be greater than the height of activity bars so there is enough space to click when you want to add new activities to a specific row. The default height is 18.
 - Use the up or down arrows to change the **Granularity for activity times**. This setting determines how many minutes are used for “stop positions” when dragging and dropping activities in a schedule. For example, if the granularity is set to 15, then an activity which starts at 10:00 will automatically snap to 10:15, 10:30, 10:45, and so on, when being moved. If this same activity is moved when the value of this setting is 5 minutes, then the activity would snap to 10:05, 10:10, 10:15, and so on. The default value is 15.
 - Select the **Show actual work row** check box to make the Actual Work rows visible for any schedule that is for the current week or for some time in the past.
 - Select the **Show adherence exceptions row** check box to make the RTA Exceptions rows visible for any schedule that is for the current week or for some time in the past.
 - Select the **Show schedule preference row** check box to make the agent's schedule preferences visible for any schedule that is for the current week or for some time in the past.
 - Select the **Show shift trade row** check box to display the shift trade row regardless of whether the agent has a trade or not.
 - If you selected Show shift trade row, select the **Only show shift trade row** for agents that have trades to only display this row for agents who have shift trades.
 - Select **Use last checked value for rounding activities** to use the previous value of the **Force time values to the nearest 15 minutes** option when you add or edit an activity in the **Modify Activity Details** dialog. For example, you select **Use last checked value for rounding activities**. Next time you edit an activity in the **Modify Activity Details** dialog, the dialog sets **Force time values to use the nearest 15 minutes** option to the value previously used for the activity. You can select **Use last checked value for rounding activities** when editing past activities to bring the agent into adherence.
 - Select the **Restore defaults** button to clear manual changes to the Display tab and return to the default settings.
 - Select the **Show vertical grid lines** checkbox to display vertical, dotted lines every hour in the day and multi-day views, and every day in the week view.
 - Select the **Color alternating rows** checkbox to make the first row have a white background, and the second row to have a shaded background, and continue alternating. This alternate row setting applies to the analysis and summary count areas, as well.
4. In the **Activity name display format** section, select one of the following:
 - Activity type only
 - Activity type and description
 - Description only
5. When all changes are made click **Apply**, then click **OK**.

Tip: To discard changes and return to the original settings, click **Restore Defaults**.

Change Messages

You can change when you want a pop-up message, or when you want the messages hidden.

Change pop-up messages

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule link**. The selected schedule opens.
2. On the **Interaction Optimizer** toolbar, click [Display Options](#).
3. On the **Messages** tab, set the pop-up message behavior. The options are:
 - Select **Do not ask before moving a single ACD activity** if you do not want the system to ask whether you want to move one ACD activity individually. Since the default activity for the entire shift is ACD, moving one ACD activity overwrites any activities it's placed over, but it also leaves the area it was moved from as ACD. It is recommended that you delete the activities that aren't needed, rather than moving a single ACD activity on top of those activities.
 - Select **Do not ask before deleting activities** if you do not want the system to warn before deleting an activity.
 - Select **Do not ask before deleting shifts** if you do not want the system to warn before deleting an entire shift.
 - Select **Do not ask whether to edit a published schedule** if you always want published schedules for the current week to open in the mode that was selected when you selected the **Do not show this message again** checkbox, when answering the original question of whether to edit the publish schedule. If "Yes" is chosen, then the published schedule always open in read-write mode. If "No" is chosen, then the published schedule always open in read-only mode.
 - Select **When not asked, always edit a published schedule** to always opens a published schedule in read-write mode. (This option is only used when the previous **Do not ask whether to edit a published schedule** option is selected). If not selected, the published schedule for the current week opens in read-only mode.
 - Select **Do not ask before publishing edited past activities** if you do not want the system to warn about publishing a schedule that has edits to activities, that occurred before the current time.
 - Select **When not asked, always use read-only mode for old schedules** to direct the system to display a message saying that schedules that end before the current week are always opened in read-only mode. By default, this option is enabled (selected).
 - Select **Notify Successful merge on save** if you want the system to display a message saying the initial load is processed successfully.
4. When all changes are made click **Apply**, then click **OK**.

Tip: To discard changes and return to the original settings, click **Restore Defaults**.

Change Export Behavior

You can change the way data is exported.

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

Change data export behavior

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the appropriate schedule from the Schedules drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. On the **Interaction Optimizer** toolbar, click [Schedule Display Options](#).
3. On the **Export** tab, set the timespan area on data export.
4. Select one of the following options:
 - **Export visible timespan** - this option captures the timespan that is visible in the current schedule view, when you select an **Export...** option. For example, 6:00 am to 10:00 am is visible in the schedule, so those times are the only times included in export.
 - **Export scrollable timespan** - this option captures the timespan that is scrollable in the current schedule view, when you select an **Export...** option. For example, 6:00 am to 10:00 am may be visible in the schedule, but if you scroll all the way right, you can see 6:00 am to 5:59 am (the following day). All the scrollable timeslots are included in the export.
 - **Export specified timespan** (default) - this option captures a specific timespan in the current schedule, when you select an **Export...** option. Use the up and down arrows to set the hours and the days for capture. For example, you might set the values at 12 hours in a day and 7 days in a week.
4. When all changes are made click **Apply**, then click **OK**.

Tip: To discard changes and return to the original settings, click **Restore Defaults**.

Edit Schedules

After you generate a schedule, you can edit it in the Interaction Optimizer Module in IC Business Manager. This section includes:

- [Time Off Requests](#)
- [Publish Notes](#)
- [Activities](#)
- [Agent Actions](#)

Notes: Multiple users can edit the same schedule at the same time. When you save a schedule that contains edits from another user, the system asks you if you want to merge the changes with the other schedule edits. If multiple users simultaneously edit the same previously published schedule, the system asks if they want to merge the changes when publishing the schedule.

Users can also open older schedules and unpublished schedules from the current week in read-only *or* read-write mode. By default, the schedule is opened in read-only mode, but the read-write mode can be selected. Older published schedules can not be unpublished, nor can older unpublished schedules be published.

Understanding time off synchronization

Because approved time off requests help determine an agent's accrual balance, time off requests must match activities in a schedule. For example, if an agent is listed on the schedule for vacation, but the backing time off request has been cancelled, Optimizer will not deduct the time from the agent's accrual balance, even though the schedule shows the agent does not have to work. Workforce management administrators should, when managing time off requests, always add, edit, and cancel the requests in the time off request view. After the administrator makes time off requests that affect scheduled activities, he or she should synchronize them in the affected schedule.

In the **Differences Between time Off Activities and Time Off Requests**, you can apply the default fixes to the differences. This table shows the types of differences encountered, and the automatic fixes to apply:

Time off request detail	Fix
No related time off activity in the schedule	Create the time off activity associated with a Time off request and resolve associated differences. This fix is selected by default, and best practice recommends the change be applied immediately.
Request was cancelled, but time off activity still exists in the schedule	Replace the time off activity with ACD. This fix is unchecked by default to encourage the administrator to review the schedule before applying a change. In many cases, the administrator will put new activities in place of the old time off activity.
Time off request length and time off activity length do not match	When the time off request is longer than the activity, overwrite the activities nearby the time off activity so the lengths will match. When the Time off request time off request is shorter than the activity, replace the "extra" time not in the activity with ACD. This fix is unchecked by default to encourage the administrator to review the schedule before applying these changes.
Time off request starts at a time different than the time off activity	Replace the activity with ACD, create a new time off activity with the same start and length as the TOR, and overwrite any activities that overlap with the time off request. This fix is unchecked by default to encourage the administrator to review the schedule before applying these changes.
Time off request activity code does not match the time off activity code	Change the activity code of the time off activity match the time off request activity code. This fix is selected by default, and best practice recommends the change be applied immediately.
Time off activity appears on the schedule but does not relate to an existing time off request	Create a backing time off request and match it to the activity. Note: This fix is the only automatic fix that directs the schedule editor to create or modify a time off request. When complete, the schedule editor opens a new time off request view, and then opens the TOR details in that view. This fix is selected by default, and best practice recommends the change be applied immediately.

In addition, use the **View selected activity in schedule** and **View selected request in time off view** to jump to a specific difference in the schedule editor. The **Differences Between time Off Activities and Time Off Requests** dialog box remains open, allowing you to view it and the schedule editor simultaneously, making it easier for the administrator to view and evaluate each difference for resolution.

Synchronize time off requests and time off activities

In the Differences Between Time Off Activities and Time Off Requests dialog box, in the Automatic Fix column Optimizer presents a default fix for each difference. This fix is applied automatically when you select Apply Checked.

Note: The request value is always used, since changes to requests should be done in the time off requests view and then applied to the scheduled time off activities.

To review the differences between time off activities and time off requests:

1. From the Optimizer Home page, open a selected schedule.
2. Open the Interaction Optimizer menu and select **Show Differences in Time Off Requests**. The Differences Between Time Off Activities and Time Off Requests dialog box opens.

Note: The scheduled time off activities shown in this dialog box either differ from the associated time off requests, or do not have a backing time off request.

3. To apply the automatic fix to all differences, make sure all boxes in the Checked column are selected and click **Apply Checked**.
4. To apply the automatic fix to only certain differences, clear the check boxes for the differences you do not want to fix and then click **Apply Checked**.
5. To analyze a scheduled time off activity in the schedule, click the **View selected activity in schedule** link.
6. To manage a scheduled time off request, click the **View selected request in time off view** link.
7. To refresh the dialog box, click **Reload differences**.

Enter Publish Notes

The **Publish Notes** dialog box opens when you select **Publish Schedule** from the **Interaction Optimizer** menu. In the **Publish Notes** dialog, type any applicable notes for the schedule you are about to publish, and click **OK**.

Notes: Multiple users can edit the same schedule at the same time. When you save a schedule that contains edits from another user, the system asks you if you want to merge the changes with the other schedule edits. If multiple users simultaneously edit the same previously published schedule, the system asks if they want to merge the changes when publishing the schedule.

Users can also open older schedules and unpublished schedules from the current week in read-only *or* read-write mode. By default, the schedule is opened in read-only mode, but the read-write mode can be selected. Older published schedules can not be unpublished, nor can older unpublished schedules be published.

Edit Activities

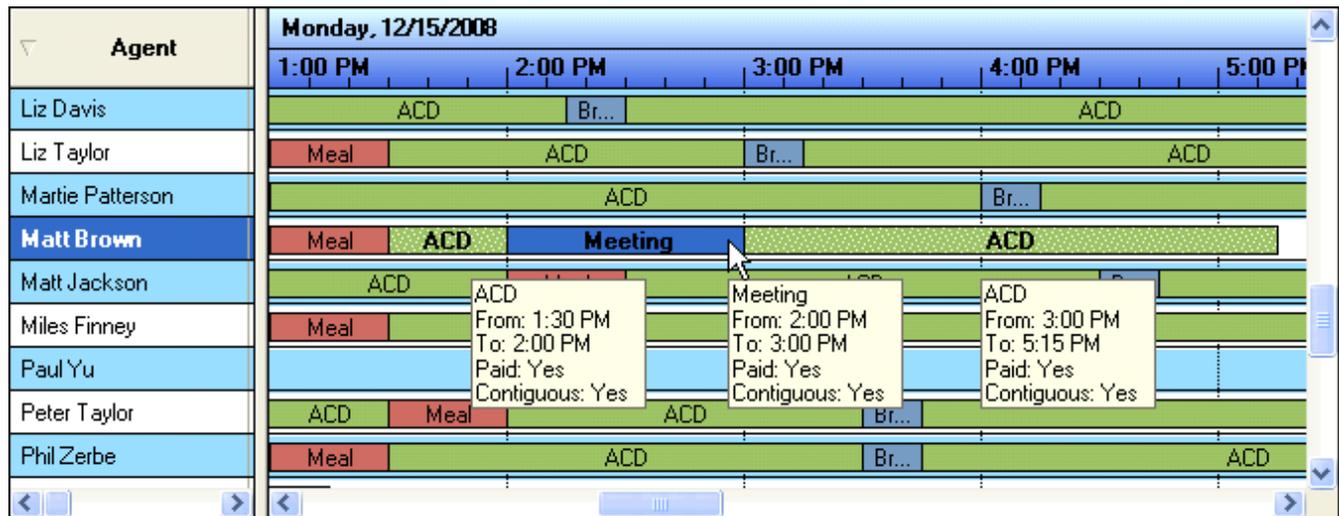
You can change existing activities, add new activities, and modify details in a [local schedule](#) that allows edits (current schedule or schedule for a future date). You cannot edit activities for [AI-powered schedules](#). This section includes:

- [Edit an existing activity](#)
- [Add a new activity](#)
- [Move an activity](#)
- [Change activity length](#)
- [Create new activity of specified length](#)
- [Create new activity of default length](#)
- [Schedule Group Activity](#)

To access several actions to apply to an agent, right-click the agent and select the appropriate activity from the menu that appears. See [Agent Actions](#) for more details.

Activity Behavior in the Schedule

The default activity type is "ACD". When you move or delete an activity, adjacent ACD activities adjust around the change. **For example:** An agent has an ACD activity from 1:30 p.m. to 4:15 p.m. and a scheduled meeting from 2:00 p.m. to 3:00 p.m. The ACD activity changes from one activity at 1:30 p.m. to 4:15 p.m. to two activities; one before the meeting at 1:30 p.m. to 2:00 p.m., and one after the meeting at 3:00 p.m. to 4:15 p.m. Also note the background of the activity with changes is dotted:



After you save changes to an activity, the the activity background returns to a solid background:



Add a New Activity

You can add a new activity to a [local schedule](#). You cannot add a new activity to an [AI-powered schedule](#).

Note: Before you add a new activity, select the appropriate **Scheduling** unit from the [Interaction Optimizer Home page](#).

Add an activity

1. From the **Interaction Optimizer Home page**, in the Scheduling area select the appropriate schedule from the **Schedules** drop-down list and click the **Open** selected schedule link. The selected schedule opens.
2. Select the activity type you want to add from the drop-down list.
3. Click [Add Activity](#) and drag the mouse to the agent row where you want to add the activity.
4. Release the cursor. The **Modify Activity Details** dialog opens.
5. Make the necessary changes to the new activity. Options include Activity Type, Length, Start time, description, determining if the activity is paid or counts toward contiguous work time, and the ability to force time values to the nearest 15 minute increment.
6. Click OK.

Edit Activity

You can edit an existing activity on a [local schedule](#). You cannot edit an existing activity for an [AI-powered schedule](#).

Note: Before you edit an activity, select the appropriate **Scheduling** unit from the **Interaction Optimizer Home page**.

Edit an existing activity

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. Select the activity, then right-click the activity and select **Edit Activity** from the menu that appears. (You can also double click on the activity to edit it). The **Modify Activity Details** dialog opens.
3. Make the necessary changes and click OK. Options include Activity Type, Length, Start time, description, determining if the activity is paid or counts toward contiguous work time, and the ability to force time values to the nearest 15 minute increment.

Note: The background of the activity with changes is dotted. You must save the schedule to save all changes. Once changes are saved, the background of the activity is solid.

Move an Activity

You can move an activity to another time slot for that agent in a [local schedule](#). You cannot move an activity in an [AI-powered schedule](#).

Note: Before you move an activity, select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Move an existing activity

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the **Schedules** drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. Select one or more activities using **Ctrl+Click**, and move (an arrow appears) them right or left within each activity's row.



3. If a single activity is moved, a confirmation dialog appears. Select **Yes** to continue, or **No** to cancel the move.
4. If you select Yes, the system moves the activity or activities to the new time slots. If you select No, the system cancels the move.

Note: If multiple non-contiguous activities in the same shift are selected, all activities between the first and last selected activity are automatically selected, when the activities are moved right or left.

Change Activity Length

You easily change the length of an activity in a [local schedule](#). You cannot change the length of an activity in an [AI-powered schedule](#).

Note: Before you configure activities, select the appropriate **Scheduling unit** from the **Interaction Optimizer Home** page.

Change the activity length

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. Select one or more activities using **Ctrl+Click**, and move (an arrow appears) them right or left within each activity's row to the new time slot.



The length of the activity or activities are changed.

Note: Re-sizing multiple activities within the same shift is not allowed.

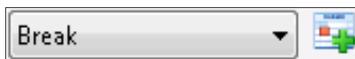
Create New Activity of Default Length

You can easily create a new activity of the default length in a [local schedule](#). You cannot create a new activity of the default length in an [AI-powered schedule](#).

Note: Before you configure activities, select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Create an activity of a default length

1. From the **Interaction Optimizer Home** page, in the **Scheduling** area click the appropriate schedule from the **Schedules** drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Click the [Activity button](#) to the right of the activity type drop-down list.



3. Drag the cursor to the location where you want to add the new activity and release the mouse. The **Modify Activity Details** dialog appears, showing the new activity.

Note: The new activity defaults to the activity type visible in the activity type drop-down list, and the length and options for this activity are set to the defaults for that activity type.

Create New Activity of Specified Length

You can easily create a new activity of a specific length in a [local schedule](#). You cannot create a new activity of a specific length in an [AI-powered schedule](#).

Note: Before you configure activities, select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Create a new activity of specific length

1. From the **Interaction Optimizer Home** page, in the **Scheduling** area select the appropriate schedule from the **Schedules** drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. Position the mouse above or below the time slot in the row where you want the new activity. Notice the pencil cursor.



3. Click the time where you want the activity to start and drag the cursor to where you want the activity to end.



4. Release the mouse. The **Modify Activity Details** dialog opens and displays the new activity.

Note: The new activity defaults to the activity type visible in the activity type drop-down list at the top of the schedule.

5. Click **OK** to save the new activity.

Schedule Group Activity

You can save time by scheduling an activity for multiple agents at the same time in a [local schedule](#). You cannot scheduling an activity for multiple agents at the same time in an [AI-powered schedule](#).

Note: Before you configure activities, select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Schedule a group activity

1. From the **Interaction Optimizer Home** page, in the **Scheduling** area select the appropriate schedule from the **Schedules** drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. Do one of the following:
 - Open the **Interaction Optimizer** menu and select **Schedule Group Activity**.
 - Right-click in the **Agent** area and select **Schedule Group Activity...** from the menu that appears.
3. In the **Schedule Activity** dialog, enter the activity details.
4. In the **Select agents and possible schedule dates** section, choose to **Show all feasible scheduling times for dates selected.** or **Allow scheduler to pick the best time to schedule.**
5. If you select **Show all feasible scheduling times for dates selected**, the system uses the list of selected agents with the selected schedule dates and processes the information. The **Start Time Picker** dialog appears, displaying the resulting headcount differences between the forecast and scheduled agents for each date selected. The following information is displayed:

- **Start Time:** This is the suggested group activity start time.
- **Headcount Difference:** This is the difference between the forecast number of people and the scheduled number of people after scheduling the group activity.

For example, you are trying to schedule 4 people for a meeting from 2:00 pm - 2:30 pm. There are 9 people forecast, and 12 people scheduled for the 2:00 pm - 2:15 pm time slot. If the 4 people were to attend this meeting, that would leave 8 people working of the 12 people scheduled. Since 9 people were forecast and 8 are actually working, the headcount difference is -1 for this 15 minute time slot.

Continue calculating the difference for the 2:15 pm - 2:30 pm time slot (the next 15 minute interval). For this time slot, there are 11 people forecast, and 13 people scheduled. If the 4 people were to attend the meeting, that would leave 9 people working of the 13 people scheduled. Since 11 people were forecast and 9 are actually working, the headcount difference is -2 for this 15 minute time slot. Factoring the headcount difference for both 15 minute time slots (30 minutes for the group activity), the aggregate of the difference is -1 plus -2, so -3.

- **Headcount Distribution:** This is the headcount difference for each 15 minute interval that is included in the 30 minute activity. Using the same example above, the distribution is listed as -1.0 / -2.0.

Note: The system calculates data every 15 minutes, providing the difference per every 15 minutes and the aggregate value of the difference for the total time period of the activity. This aggregate provides helpful scheduling information at-a-glance.

- In the **Start Time Picker** dialog box, select the best possible time for the group activity. Multiple times can be selected to schedule multiple activities. Click **OK** to save the activity. Click **Retry** to return to the **Schedule Activity** dialog box and start over.

Tip: A Headcount Difference closer to 0 (or a more positive number), is the best time to schedule an activity.

6. If you select the **Allow scheduler to pick the best time to schedule** option, the system asks for confirmation of the activity start time.
7. If confirmed, the activity is scheduled. If the start time is not confirmed, the scheduling is canceled. If you select the **Allow scheduler to pick the best time to schedule**, the Start Time Picker dialog does not appear.

Agent Actions

When you right-click an agent in a [local schedule](#) (where editing is allowed) in the day, multi-day, or week view, you can perform the following actions:

- [Add Agent\(s...\)](#)
- [Remove Shift\(s\)](#)
- [Assign Shift...](#)
- [Assign All Shifts](#) week view only
- [Swap Shifts](#)
- [Swap All Shifts](#) week view only
- [Copy Shift to Agent\(s\)...](#)
- [Show Agent Details](#)
- [Schedule Group Activity](#)
- [Create Base Schedule](#)
- [Edit Base Schedule](#)
- [Toggle Detail Information](#)

When you right-click an agent in an [AI-powered schedule](#), you can perform the following actions:

- [Show Agent Details](#)
- [Create Base Schedule](#)
- [Edit Base Schedule](#)
- [Toggle Detail Information](#)

Agent Information Area: View agent names, paid hours and total hours in the [agent area](#) left of the schedule in the workspace.

Configuration: Consider and compare [agent preference configurations](#) when scheduling.

Intraday Monitoring: [Compare actual activity to forecast activity](#) within a given day.

Reforecasting: [Reforecast in Intraday Monitoring](#) and [Reforecasting in Scheduling](#) to create new forecasts based on the current trends for the day.

Schedule Preferences: [View all the preferences for the agents](#) in their agent group.

Agent Groups: [Create groups of peer agents](#) who can handle the same types of interactions and have similar skills.

Agent Data: [View and edit agent data](#) to be used to rank agents in agent groups.

Group Activity Scheduler: [Schedule an activity for multiple agents](#) using a range of possible schedule dates.

Time Off Requests Application: View and [apply time off requests](#) that were created after the schedule generation.

Analysis and Summary Counts Area: View [scheduled and forecast](#) counts, [activity counts](#), [expected service level](#), [expected ASA](#), and [expected occupancy](#) based on the view mode.

Status Bar Area: View the [status bar](#) at-a-glance to see the number of agents, view mode, changes not saved, editing status, and filter options that are associated with the schedule in the [workspace](#).

Filter and Sort Options: Use the [filter and sort options](#) to set filter criteria and sort order.

Schedule Display Options: Use the [schedule display options](#) to set activity, row, and column appearance, as well as, to configure if and when to display informational messages.

Schedule Publishing: Make schedules official for the current time period, or for a future time period.

Graphs: View schedule and forecast data in line or bar, in two dimensional or three dimensional [graph](#) format.

Export: [Export](#) schedule data and forecast totals to a document in HTML format to print or to post on a web site.

Miscellaneous Commands: [Save](#) and [publish](#) schedule changes, zoom [in](#) or [out](#) when viewing a schedule, and use [quick keys](#) to speed navigation.

Actual Work and RTA Exceptions: View agents [actual work](#) time and [real-time adherence](#) (or RTA exception) information on current or past schedules.

Add Agent(s)....

You can easily add one or more agents to a [local schedule](#). You cannot add one or more agents to an [AI-powered schedule](#).

Note: Before you configure agent settings, select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Add an agent to the schedule

1. From the **Interaction Optimizer Home** page, in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule** link. The selected schedule opens.
2. Right-click any agent's name and select **Add Agent(s)** from the menu that appears.
3. In the **Add Agents(s)** dialog, select one or more agent name and click **OK**.
4. The additional agents appear in the agent column, but they don't have shifts until you add activities for them. By default, the **Show agents that do not match filter criteria** option is selected. This option shows all agents regardless if an agent is not available due to being filtered, e.g., a shift rotation filter.

Note: The **Add Agents** dialog lists only agents in the same scheduling unit as the one used to generate the schedule.

Tip: Use **Shift+click** to select a range of agent names. Use **Ctrl+click** to select multiple agent names.

Remove Shift(s) (day or multi-day view)

Unexpected circumstances may require you to remove shift(s) from a [local schedule](#). You cannot remove shift(s) from an [AI-powered schedule](#).

Note: Before you configure shifts, select the appropriate scheduling unit from the **Interaction Optimizer Home page Scheduling unit** drop-down list.

Remove one or more shifts from the schedule ([day view](#) and [multi-day view](#))

1. From the [Interaction Optimizer Home page](#), in the **Scheduling** area click the appropriate schedule from the Schedules drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Select all the agents' names that have a shift you want to remove for the currently visible day.
3. Right-click and select **Remove shift(s)** from the menu that appears.
4. Click **Yes** to confirm the shift removal.

Note: The shift is removed from the schedule, but the agent's name remains.

Tip: Use **Shift+click** to select a range of agent names from which to remove shifts. Use **Ctrl+click** to select multiple agent names.

Remove Shift(s) ([week view](#))

1. From the **Interaction Optimizer Home page**, in the **Configuration** area click **Shifts**. The **Shifts** tab opens.
2. Right-click the shift to remove and select [Delete](#) from the menu that appears.
3. Click **Yes** to confirm shift removal.

Remove Agent(s) ([week view](#))

1. From the [Interaction Optimizer Home page](#), in the **Scheduling** area click the appropriate schedule from the Schedules drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Select all the agents' names that have a shift you want to remove for the currently visible day.
3. Right-click and select **Remove shift(s)** from the menu that appears.
4. Click **Yes** to confirm the agent removal.

Assign Shift

You can easily assign one agent's shift to another agent in the [local schedule](#) you are editing. This action is available in [day](#) and [multi-day](#) view, but not in [week](#) view. You cannot assign shifts in an [AI-powered schedule](#).

Note: Before you configure shifts, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

Assign a shift from one agent to another

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the appropriate schedule from the **Schedules** drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Right-click any agent's name and select **Assign Shift...** from the menu that appears.
3. Select one agent in the **Assign Shift** dialog box, and click **OK**.

The shift is now assigned to the agent selected. The agent's name that the shift was assigned *from* is still displayed, but no shift is displayed for that agent. By default, the **Show agents that do not match filter criteria** option is selected. This option shows all agents regardless if an agent is not available due to being filtered, e.g., a shift rotation filter.

Note: The **Assign Shift** dialog box lists only agents in the same scheduling unit and not yet assigned a shift for the currently visible day.

Assign All Shifts

You can easily assign all shifts assigned to an agent in a weekly [local schedule](#) to another agent. This action is not available in [day](#) or [multi-day](#) views. You cannot assign all shifts in an [AI-powered schedule](#).

Note: Before you configure settings, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

Assign all shifts in a weekly schedule to another agent

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the appropriate schedule from the **Schedules** drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Right-click any agent's name and select **Assign All Shifts...** from the menu that appears.
3. Select one agent in the **Assign All Shifts** dialog box, and click **OK**.
4. The weekly shifts are now assigned to the agent selected. The agent's name that the weekly shifts were assigned *from* is still displayed, but no shifts are displayed for that agent.

By default, the **Show agents that do not match filter criteria** option is selected. This option shows all agents regardless if an agent is not available due to being filtered, e.g., a shift rotation filter.

Notes: The **Assign All Shifts** dialog box lists only agents in the same scheduling unit and not yet assigned a shift in this schedule.

You cannot assign all shifts during the current week if some of those shifts are before or on the day you are editing the schedule.

Swap Shifts (day or multi-day view)

You can switch (or swap) one agent's shift with another agent's shift in a [local schedule](#). This action is available in [day](#) and [multi-day](#) view, but not in [week](#) view. You cannot swap shifts in an [AI-powered schedule](#).

Note: Before you configure shifts, select the appropriate scheduling unit from the **Interaction Optimizer Home page Scheduling unit** drop-down list.

Swap a shift from one agent to another

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the appropriate schedule from the **Schedules** drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Highlight both agents' names, right-click, and select **Swap shift(s)** from the menu that appears.
3. Click **Yes** to confirm the shift swap.

Swap Shifts (week view)

You can switch (or swap) two shifts in [week](#) view. This action is not available in [day](#) and [multi-day](#) view. The two shifts must meet one of the following criteria:

1. They both belong to the same agent.
2. They both occur on the same day.
3. If they belong to different agents on different days, the agent which is getting the newly swapped shift cannot have a current shift on that day. For example, if Alice has a shift on Monday but not on Tuesday, and Bob has a shift on Tuesday but not on Monday, then you can swap their shifts. However, if Alice has shift on Monday and Tuesday, she cannot swap her shift with Bob who has a shift on Tuesday.

Swap a shift from one agent to another

1. Highlight both shifts, right-click, and select **Swap shift(s)** from the menu.
2. Click **Yes** to confirm the shift swap.

Swap All Shifts

You can switch (or swap) all of an agent's shifts in a week with another agent's shifts in that [week](#) in a [local schedule](#). This action is not available in [day](#) and [multi-day](#) view. You cannot swap all shifts in an [AI-powered schedule](#).

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

To swap all shifts in a week from one agent to another:

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the appropriate schedule from the **Schedules** drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Highlight both agents' names, right-click, and select **Swap all shifts** from the menu that appears.
3. Click **Yes** to confirm the shift swap.

Copy Shift to Agents

You can copy an agent's shift to another agent or agents (this maintains or keeps the assignment of the originally selected agent) in a [local schedule](#). This action is available in [day](#) and [multi-day](#) view, but not in [week](#) view. You cannot copy shifts in an [AI-powered schedule](#).

Note: Before you configure shifts, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

To copy a shift from one agent to another agent or agents:

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the appropriate schedule from the **Schedules** drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Right-click the agent's name and select **Copy Shift to Agents** from the menu that appears.
3. Select one or more agents in the **Copy Shift from** dialog, and click **OK**.

The shift is now assigned to the selected agents, but the shift remains assigned to the original agent as well.

Note: Shifts can only be copied on days when the agent receiving a copy of the shift is not already assigned a shift.

Tips: Use **Shift+click** to select a range of agent names to copy shifts. Use **Ctrl+Click** to select multiple agent names. Drag and drop a shift from one day to another day, or from one agent to another agent.

Copy Shifts to Agent

You can copy an agent's shift to another agent or agents (this maintains or keeps the assignment of the originally selected agent) in a [local schedule](#). This action is available in [week](#) view, but not in [day](#) or [multi-day](#) view. You cannot copy shifts in an [AI-powered schedule](#).

Note: Before you configure shifts, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

To copy a shift from one agent to another agent or agents:

1. From the **Interaction Optimizer Home** page, in the Scheduling area click the appropriate schedule from the **Schedules** drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Right-click on the agent's name and select **Copy Shift to Agents** from the menu that appears.
3. Select one or more shifts in the **Copy Shift from** dialog box, and click **OK**.

The shift is now assigned to the selected agents, but the shift remains assigned to the original agent as well.

Note: Shifts can only be copied on days when the agent receiving a copy of the shift is not already assigned a shift.

Tips: Use **Shift+click** to select a range of agent names to copy shifts. Use **Ctrl+click** to select multiple agent names. Drag and drop a shift from one day to another day, or from one agent to another agent.

Show Agent Details

You can view agent details, such as workgroup memberships and constraints, if editing a schedule in [day](#), [multi-day](#), or [week](#) view.

Note: Before you configure shifts, select the appropriate scheduling unit from the **Interaction Optimizer Home** page **Scheduling unit** drop-down list.

To view agent details:

1. From the **Interaction Optimizer Home** page, in the Scheduling area click the appropriate schedule from the Schedules drop-down list and click **Open selected schedule**. The **Schedule** tab opens.
2. Right-click the agent's name and select **Show Agent Details** from the menu that appears.
3. The **Agent Details** screen displays information in a scrolling, view-only dialog . When finished viewing the information, click **OK**.

Note: When an agent has more than one type of a constraint, the most rigid constraint is shown.

Work with agent-initiated shift trades

Shift trading enables agents to trade daily shifts or parts of a shift with other agents based on business rules that the scheduling administrator configures. This feature increases agent satisfaction and also decreases the amount of time that the administrator spends manually changing schedules.

About Shift Trading configuration

The Shift Trading Configuration view allows administrators to set up the options that are appropriate for their call center. From the Interaction Optimizer Home page, in the Configuration area select Shift Trading. The Shift Trading tab opens.

Enable Shift Trading

Use the Enable Shift Trading check box to enable or disable all shift trading functionality for the scheduling unit. When you leave this box unchecked, the Schedule Trading tab will not appear in an agent's client and they cannot add or change trades. If Shift Trading is enabled, and you then disable this check box, Optimizer does not delete any existing trade requests, but the requests are no longer visible until you re-enable the check box.

Trades must be at least this many hours in the future

Use the up and down controls to define how much time is needed to give agents and administrators proper warning about a change to the schedule that resulted from a schedule trade.

Depending on the number you set here, agents cannot create a trade request where the first possible trade occurs less than number of hours in the future. Optimizer checks hourly for expired trades and changes the trade status accordingly. Optimizer validates trade times before saving it as a matched trade to confirm that the chosen times are not far enough in the future that the save will fail.

Minimum trade length (in hours)

Use the up and down controls to protect from agents trading a block of time that is too short. When the agent creates a trade request, Optimizer checks the length and will not save invalid lengths.

Minimum consecutive block of time left after partial trade (in hours)

Use the up and down controls to set the lowest number of consecutive hours allowed to remain in an agent's shift after he or she has been granted a partial trade request. This setting is designed to protect an agent from having a very short shift after making a trade. The block of time left refers to the part of the agent's shift that is left after the trade. For example, if an agent has a 6 hour shift and trades away 4 hours, then he or she will be left with a 2-hour shift.

Purge expired trades from database once they are this old (in days)

Use the up and down controls to define when to purge old trade requests is designed to reduce the size of the database. Any trade request that is in the expired or canceled status after the configured number of days will be deleted from the database.

Partial day trade recommendation window (in hours)

Use the up and down controls to determine how close to the original request any potential trades must be before being shown to other agents. For example, assume Agent A's shift begins at 8:00 a.m. and he wants to take off from 8:00 a.m. to 12:00 p.m. for a doctor's appointment. Setting the partial day trade recommendation window to 2 hours, the system only considers trades that begin at 8:00 a.m. and end between 10:00 a.m. and 2:00 p.m. A possible trade ending at 3:00 p.m. will not be shown in the list of trades from which the agent can pick because the difference is more than 2 hours from 12:00 p.m.

Require admin approval for trades that contain a partial shift

Select this check box to automatically set any partial day trades to Pending status until an administrator approves or denies the partial day trade. Clear this check box to direct Optimizer to automatically approve partial day trades that meet matching and rule criteria.

Agent matching criteria

Select the matching criteria by which agents can trade. Depending on your selection, agents will only be allowed to trade with agents in the same scheduling unit, agents with the same staff type, agents in the same coverage group, agents that have the same ACD workgroups, or agents that have the same ACD workgroups and skills. Once set, neither agents nor administrators can override the criteria to create requests with non-matching agents.

If you chose the Agents that belong to the same ACD workgroups criteria, matches only include workgroups that have queues, and will receive interactions. If an agent belongs to additional workgroups that do not have queues, the group of agents with which they can trade does not change.

Activity type rules

Activity type rules determine what to do with each activity when one agent's schedule is traded with another agent's schedule. Select an action for each activity type. Stays with schedule, Cannot be traded, and Replaced with ACD.

- **Stays with schedule.** The activity given by one agent is included in the schedule received by the other agent.
- **Replaced with ACD.** The activity given by one agent is not included in the schedule received by the other agent. Instead, the time range receives an ACD activity.

- **Cannot be traded.** An agent cannot trade any schedule range that includes this activity. For example, if an agent attempts to trade a Time Off activity, he or she receives an error message and Optimizer will not complete the trade.

Note: Time off is restricted from trade requests. Therefore, Time Off and Vacation are permanently set to **Cannot be traded**.

Admin Review column

Check this column if you do not want to automatically approve a matched trade. Instead, Optimizer sets matched trades to Pending status until the administrator approves or denies the match.

Warning column

Check this column if you want to present a warning to the agent whenever this activity type is included in any part of the shift to be traded.

Warning Message column

If the Warning column contains a check mark for the activity type, you must also enter a warning message in this column. If you check the Warning column but do not add a warning message, Optimizer will not save the configuration. These warnings appear to the agent when he or she attempts to trade a shift that includes this activity type.

About Shift Trading Requests

From the [Interaction Optimizer Home page's](#) Scheduling area, select Shift Trading Requests to open the Shift Trading Requests tab. This view allows administrators to manage both matched and unmatched trade requests. Here, you can manage matched trade requests, and you can also view unmatched trade requests.

The following buttons allow an administrator to manage the trade requests:

	Approve proposed shift trade	Use this button to approve a matched trade currently set to "Pending". This feature is also available for previously denied matches if the original request: <ul style="list-style-type: none"> • Has not later been approved • Does not have another pending match
	Deny entire shift trade request	Use this button to deny an entire request that is unmatched or not already approved.
	Deny pending shift trade match	Use this button to deny a pending shift trade match without denying the entire request. The request remains open.

The link to view schedules will be available for both matched and unmatched trades. When the administrator approves a matched trade, the schedules will be updated immediately.

Show requests after

Use the controls in this area to filter the selection of shift trading requests you want to view. These controls change, depending on the range you select.

Pending | Show Previous Filter button

Click the **Pending** button, shown by default, to view only pending matched trades and filter out approved or denied trades. When you click the Pending button, it changes to Show Previous Filter.

Click **Show Previous Filter** to return to the trade requests that match the last filter criteria. The system returns either a complete list, or a list based on any variables you set from a column heading's filter menu prior to clicking the Pending button. For more information about filtering trade requests, see the **Related topics**.

Status

Click the box directly below the Status column heading to view a list of statuses by which to filter the trade requests. Select one or more of the following check boxes: All, Approved, Canceled, Denied Match, Denied Request, Expired, Pending, and Unmatched.

Offering Agent

The agent that created the initial unmatched trade request.

Offering Agent's Schedule

A link to the schedule for the agent who initiated the trade request. Click it to open this agent's schedule

Reviewer

If an administrator has reviewed a trade request, his or her name appears here.

Reviewed Date

The date an administrator reviewed the trade request.

Accepting Agent

The agent that accepted a matched trade.

Accepting Agent's Schedule

A link to the schedule for the agent who accepted the trade request. Click it to open the agent's schedule.

Deny Reason

If a trade request was denied by the system or an admin, the reason appears here. For more information on trade request denial options and status values, see the **Related Topics**.

Shift trade status values

Optimizer provides a list of status values that vary, depending on whether the trade is a request or a match.

Status values for trade requests

The allowed status values for trade requests are:

Canceled

The trade request was canceled by the offering agent.

Note: Trade requests can only be canceled by the offering agent that creates the initial trade request. If the trade is matched to another agent, then the accepting agent can cancel the match and the trade request will be available for selection by another agent.

Denied Request

The trade request and all pending matches were denied, and no other agents will see it.

Expired

A trade request can be assigned an expired status for any of the following reasons:

- The trade request is invalid, and a trade cannot occur within the specified time.
- The trade has an expiration time specified by the offering agent. The trade will expire within one hour of the set expiration time.
- The start time specified by the offering agent occurs in the future time that is less than the number of hours specified for how long in the future to allow trades as specified in the shift trading configuration view.
- None of the possible start times that the offering agent is willing to work is at least the number of hours in the future specified in the schedule trading configuration view.

Pending

The trade request has been matched, but requires administrator review.

Unmatched

The initial state for a trade request that is created. As of the current viewing session, no agent has accepted this trade. A request is unmatched only if it does not have any associated matches. An associated match can be approved, denied, canceled, etc.

Status values for trade matches

The allowed status values for trade matches are:

Pending

Similar to matched trade requests, this status means that the trade request has been matched, but requires the administrator review.

Approved

This match has been approved and the shifts have already been traded.

Denied Match

The match was denied. No schedules were traded.

Canceled

The match was canceled by the accepting agent.

Enable shift trading

Use the Enable Shift Trading check box to enable or disable all shift trading functionality for the scheduling unit. If shift trading is disabled, or unchecked, the Schedule Trading tab will not appear in an agent's client and they cannot add or change trades. If Shift Trading is enabled, and you later disable it, Optimizer does not delete any existing trade requests, but the requests are no longer visible until you re-enable the check box.

1. From the [Interaction Optimizer Home page](#), in the Configuration area click the **Shift Trading** link. The **Shift Trading** tab opens.
2. Check the **Enable Shift Trading** check box.
3. Configure the remaining default values.
4. Click **Save**.

For more information on shift trading configuration, see the **Related Topics**.

Configure shift trade requirements

On the Shift Trading tab, you can configure the requirements and behavior of shift trade requests. To configure the trade requirements, shift trading must be enabled.

1. From the [Interaction Optimizer Home page](#), in the Configuration area click the **Shift Trading** link. The **Shift Trading** tab opens.
2. In the **Trades must be at least this many hours in the future** area, use the up and down controls to define how much time is needed to give agents and administrators proper warning about a change to the schedule that resulted from a schedule trade.

Note: Depending on the number you set here, agents cannot create a trade request where the first possible trade occurs less than number of hours in the future. Optimizer checks hourly for expired trades and changes the trade status accordingly. Optimizer validates trade times before saving it as a matched trade to confirm that the chosen times are not far enough in the future that the save will fail.

3. In the **Minimum trade length (in hours)** area, use the up and down controls to protect from agents trading a block of time that is too short. When the agent creates a trade request, Optimizer checks the length and will not save invalid lengths.
4. In the **Minimum consecutive block of time left after partial trade (in hours) area**, use the up and down controls to set the lowest number of consecutive hours allowed to remain in the agent's daily shift after an agent has been granted a partial trade request. This option ensures an agent does not trade away too many hours and is then left with a shift that is too short. For example, trading 7 hours of an 8 hour shift would require the agent to come in for just one hour of work.
5. In the **Purge expired trades from database once they are this old (in days)** area, use the up and down controls to define when to purge old trade requests is designed to reduce the size of the database. Any trade request that is in the expired or canceled status after the configured number of days will be deleted from the database. Approved or denied trades are not removed from the database, allowing supervisors to view trade details, such as the reason a person's schedule was changed or who denied a request.
6. In the **Partial day trade recommendation window (in hours)** area, to set the number of hours an agent is willing to adjust from his or her original start or end time. For example, if an agent wants to finish her shift at noon, setting this value to 1 hour will show any trades that end between 11:00 AM and 1:00 PM. Use this option to show possible trades, helpful if an agent wants to see matches that do not exactly fit his or her specifications. If this number is larger, the system shows more matches. If an agent searches for partial day trades, the system only includes more recommendations in the middle of the shift to prevent the agent from getting a split shift. For example, Agent X's scheduled shift is 8:00 a.m. to 5:00 p.m. and she searches for the option to take off 1:00 p.m. to 5:00 p.m., the system will show recommendations that start between 12:00 and 2:00 p.m. and end at 5:00 p.m., but not ones that end at 4:00 or 4:30 p.m.
7. To specify that an administrator approve or deny any partial day trade requests, select the **Require admin approval for trades that contain a partial shift** check box. Or to select automatic approval for partial day trades, clear this check box.

Note: The system will only automatically approve the partial day trade if all matching and rule criteria have been met

Review agent matching criteria for shift trading requests

This section describes the matching criteria by which agents can trade. Set up agent matching criteria on the **Shift Trading** tab, available from the Configuration area of the Interaction Optimizer Home page.

Note: Before you begin, familiarize yourself with [staff types](#) and [coverage groups](#).

Depending on your selection, agents will only be allowed to trade with agents in the same scheduling unit, agents with the same staff type, agents in the same coverage group, agents that have the same ACD workgroups, or agents that have the same ACD workgroups and skills. Once set, neither agents or administrators can override the criteria to create requests with non-matching agents. The following list describes the agent matching criteria options:

- **All agents in this scheduling unit:** This option's only limitation is that the agents belong to the same scheduling unit. If the agent is in a different scheduling unit, they cannot appear in the same schedule. Therefore, it is not possible for them to trade shifts. This is the broadest constraint.
- **Agents belonging to the same staff type:** Agents in the same staff type can handle the same interactions, but they might normally work different hours during the day. If you select this option, agents will have fewer overlapping scheduled hours and therefore more trade opportunity.
- **Agents belonging to the same coverage group:** Agents in the same staff type can handle the same interactions and typically work similar hours during the day.
- **Agents that have all the same ACD workgroups:** Agents must belong to all of the same workgroups that have a queue. Agents can trade with another agent that has an additional workgroup without a queue, since that workgroup may exist only for reporting or team management purposes.

Note: Agents cannot trade shifts with another agent that has a different workgroup with a queue.

- **Agents that have all the same ACD workgroups and skills:** Two agents are only allowed to trade shifts if they have the same workgroups that have queues, and they have the same skills. This constraint protects the service levels from being affected by trades, but it is also likely to significantly reduce the number of possible trades. This constraint is the most restrictive.

Set agent matching criteria for shift trading requests

Here, select the matching criteria by which agents can trade. Depending on your selection, agents will only be allowed to trade with agents in the same scheduling unit, agents with the same staff type, agents in the same coverage group, agents that have the same ACD workgroups, or agents that have the same ACD workgroups and skills. Once set, neither agents or administrators can override the criteria to create requests with non-matching agents.

If you choose the Agents that belong to the same ACD workgroups criteria, matches only include workgroups that have queues, and will receive interactions. If an agent belongs to additional workgroups that do not have queues, the group of agents with which they can trade does not change.

1. From the [Interaction Optimizer Home page](#), in the Configuration area click the **Shift Trading** link. The **Shift Trading** tab opens.
2. In the Agent matching criteria area, select one of the following:
 - All agents in this scheduling unit
 - Agents belonging to the same staff type
 - Agents belonging to the same coverage group
 - Agents that have all the same ACD workgroups
 - Agents that have all the same ACD workgroups and skills

Specify activity type rules for shift trade requests

Activity type rules determine what to do with each activity when one agent's schedule is traded with another agent's schedule. Select an action for each activity type. To configure these shift trade requirements, shift trading must be enabled.

1. From the [Interaction Optimizer Home page](#), in the Configuration area click the **Shift Trading** link. The **Shift Trading** tab opens.
2. In the **Activity type rules** area, locate the activity type whose shift trading request rule you want to configure.
3. In the desired activity type's **Action** column, click the existing action and from the menu that appears, select one of the following:
 - **Stays with schedule** (the activity given by one agent is included in the schedule received by the other agent)
 - **Cannot be traded** (an agent cannot trade any schedule range that includes this activity)
 - **Replaced with ACD** (the activity given by one agent is not included in the schedule received by the other agent. Instead, the time range receives an ACD activity)

Note: If you chose **Stays with schedule** or **Replaced with ACD**, a check box appears in the **Admin Review** column.

4. If you choose **Stays with schedule** or **Replaced with ACD**, the **Admin Review** column's check box appears. Select this check box if you do not want to automatically approve a matched trade. Optimizer sets matched trades to Pending status until the administrator approves or denies the match.
5. Select the activity type's **Warning** column check box if you want to present a warning to the agent whenever this activity type is included in any part of the shift to be traded.
6. If you selected the activity type's **Warning** column check box, in the **Warning Message** column field enter a warning message to describe behavior if this activity is traded.

Note: If you select the **Warning** column's check box, but do not add a warning message, Optimizer will not save the configuration. These warnings appear to the agent when he or she attempts to trade a shift that includes this activity type.

Approve a matched shift trade request

You can approve a matched shift trade request from the Shift Trading tab. If you have configured Optimizer to require admin approval for full or partial shift trade requests, the agent sees a message, "This post has been placed in Admin review", when he or she posts the trade request.

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click the Shift Trading Requests link. The Shift Trading Requests tab opens.
2. To approve a time off request, select the request you want to approve and click the [Approve proposed trade](#) button.

For more information about shift trading, see the **Related Topics**.

Denial of shift trade requests

Depending on configuration, you can specify that an administrator must review shift trade requests and approve or deny them. Requests can also be denied depending on the configuration you set up for activity type rules and agent matching criteria. Shift trade requests can be denied for the following reasons, which appear in the Deny Reason column on the Shift Trading Requests tab:

Agent is not a part of the scheduling unit

These specifications are set when configuring shift trade requirements.

Denied by admin

Shift trading is configured to require that an administrator review each shift trade request. The administrator reviewed and denied the request.

Invalid trade matching criteria

A generic error message indicating that some criteria did not match correctly, preventing the trade from occurring.

Minimum trade hours not met

The length of the hours to be traded was too short. These values are set when configuring shift trade requirements.

Minimum trade start buffer hours not met

If the system is configured so that the trade must start after least 24 hours from now and the start time for the trade is less than 24 hours from now, minimum trade start buffer hours will not be met.

Trade away times do not have a published schedule with tradable activities

Traded times must have an associated published schedule with configured tradable activities.

Trade time not in increments of 15 minutes

Trade times must be requested in 15 minute increments.

Trade start time is after trade end time

The shift trade start time must begin prior to the shift trade end time.

Deny shift trade request or shift trade match

You can deny a full trade request, which eliminates the chance that an original trade request made by an offering agent could ever be matched by another agent; and the trade match, which only removes the pairing between the offering agent and the accepting agent.

You can deny shift trade requests and matches in the Shift Trading Requests tab.

Deny a shift trade request

1. From the [Interaction Optimizer Home page](#), in the **Scheduling** area click the **Shift Trading Requests** link. The Shift Trading tab opens.
2. Select the full shift trade request and click the [Deny entire shift trade request](#) button. The shift trade request's status changes to Denied.

Note: The original trade request has now been denied and will no longer be visible or available for consideration by other accepting agents.

Deny a shift trade match

1. From the [Interaction Optimizer Home page](#), in the **Scheduling** area click the **Shift Trading Requests** link. The Shift Trading tab opens.
2. Select the full shift trade request and click the [Deny pending shift trade match](#) button. The shift trade match's status changes to Denied.

Note: The original trade request created by the offering agent is now available for other agents to match.

For more information about shift trade requests, see the **Related Topics**.

Filter and sort shift trade requests

You can filter and sort to search and manage time off requests.

1. From the [Interaction Optimizer Home page](#), in the **Scheduling** area click the **Shift Trading Requests** link. The **Shift Trading** tab opens.
2. In the field directly below the column heading, click the icon to the left of the field and do the following:
 - a. Click the icon in the left side of the column heading.
 - b. From the drop-down list that appears, select an option and then click inside the column heading box.
 - c. Type the value to use to filter the view, or where applicable use the icons on the right side of the column heading to select available values. The view is filtered based on your selection. You can filter by more than one column heading at a time.
 - d. To clear a filter, click the "x" in the right side of the column heading for each filter you want to clear.
3. To sort shift trading requests, click anywhere in the header that contains the criteria by which you want to sort (Status, Offering Agent, Offering Agent's Schedule, Reviewer, etc.).

For more information about time off requests, see the **Related Topics**.

Select a range of shift trade requests to view

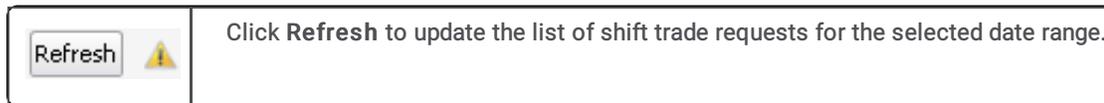
You can filter the selection of shift trading requests you want to view.

1. From the [Interaction Optimizer Home page](#), in the **Scheduling** area click the **Shift Trading Requests** link. The **Shift Trading** tab opens.
2. Click the [date range](#) button above the shift trading requests grid.
3. From the menu that appears, do one of the following:
 - To view shift trading requests after a specific date, select **Future** and click the calendar button to select the date.
 - To view shift trading requests within a specific date range, click **Date Range** and use the calendar buttons to narrow the viewing selection.
 - To view shift trading requests on a specific date, click **Day** and use the calendar button to select the date.
 - To view shift trading requests within a specific week, click **Week** and use the calendar button to choose the week to view.
 - To view shift trading requests within a single month, click **Month** and use the arrow buttons to narrow the selection to the desired month and year.
 - To view all shift trading requests in a single year, click **Year** and use the drop-down list (or arrow buttons) to select the desired year.

For more information about shift trade requests, see the **Related Topics**.

Refresh the shift trade date range

If you change the range of dates by which to filter the selection of shift trading requests, you may need to update, or refresh, the current list. If your date range selection changes the current list of shift trade requests, a Refresh button appears:



Intraday Management Overview

The Intraday Management area of the Interaction Optimizer Home page allows authorized users to analyze actual versus forecasting data, reforecast based on current daily trends, and provides the latest schedule adherence information for currently scheduled agents. Intraday monitoring allows you compare actual activity of the day to forecast activity of the day. This monitoring provides the information to analyze and make any necessary changes to the schedule for the rest of the day. For example, if the analysis shows that the actual needs for the day are much higher than the forecast needs, then additional agents could be called in for the afternoon, or perhaps a non-critical afternoon training session could be cancelled. You cannot calculate service levels or ASA on the CIC server.

Note: Before you configure Intraday Management, make sure you select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Configuration Link	Purpose
Intraday Monitoring	Shows actual activity on a specific day compared to forecast data. Allows reforecasting the forecast based on current trends for the day.
Real-time Adherence	Provides the latest schedule adherence information for agents currently scheduled.
Adherence Exceptions	View and excuse adherence exceptions.

Intraday Monitoring Overview

You can use the intraday monitoring features to compare the forecast and actual Customer Interaction Center activity, such as number of interactions or average handle time in data tables and in data graphs.

Note: You cannot calculate service levels or ASA on the CIC server.

This section includes:

- [Use the Intraday Monitoring data table](#)
- [Use Intraday Monitoring in graph view](#)
- [Set Intraday Monitoring Display Options](#)

Use the Intraday Monitoring Data Table

You can use the intraday monitoring/reforecasting features to view and compare actual activity of a specific day to the forecast activity of the day. **Note:** You cannot calculate service levels or ASA on the CIC server.

Note: Before you configure settings, make sure you select the appropriate **Scheduling unit** from the [Interaction Optimizer Home page](#).

Use the intraday monitoring data table

1. From the **Interaction Optimizer Home** page, in the Intraday Management area select **Intraday Monitoring**. The Intraday information is displayed in the workspace. By default, the **Data Table** view is displayed.
2. In the **Criteria** section set any of the following filters:
 - **Workgroup**: Select the workgroup from the pull-down list that you want to limit the view to in the schedule. Only one workgroup can be selected, otherwise all <ALL> (default setting) workgroups are included. The workgroups available are the workgroups that are included in the scheduling unit from which the schedule is generated. The last used or viewed workgroup is persistent.
 - **Start time**: Use the up and down arrows to set the start time you want to limit the view to in the information displayed. "8:00 AM" is the default start time.

Note: The start and end times are persistent by the user logged in, meaning once the times are changed, they do not change back to the default times for that user. For example, if you used the same login as another user that set the start time at 7:00 AM and the end time to 6:00 PM, then those times would persist.

- **End time**: Use the up and down arrows to set the end time you want to limit the view to in the information displayed. "5:00 PM" is the default end time. See the note above.
- **Date**: Select the date for the intraday information to display. Click the up arrow to move the date back or click the down arrow to move the date forward. You can also click the pull-down menu to display a calendar and select a date. The default date is the current day.

Note: Intraday monitoring is mostly beneficial for monitoring the current day's actual activities, but can also be useful to view data from past or future days.

- **Refresh**: Click this button to refresh the intraday information displayed. If you make a change to the start time, end time, or date, you must click **Refresh** to update the view.

Note: If Interaction Optimizer cannot complete the calculation, the forecast service level values in Intraday Monitoring revert to 0. This result may occur if no forecast volume exists, no agents are available to handle the forecast at that interval, or not enough agents are configured to handle all of the interactions.

3. View and compare information in the **data table** view. The information is displayed in numeric value of each 30 minute interval, and includes columns that show the value difference between the forecast data and actual data. There are summary rows at the bottom of the table that show the percentage differences between the forecast data and the actual data, up to the last completed time period. Data can be displayed in the following columns:

Note: To change the columns that are displayed in the default table view, see [Select Columns to Display](#).

Tip: You can also drag and drop the column headers to change the order or width of the columns.

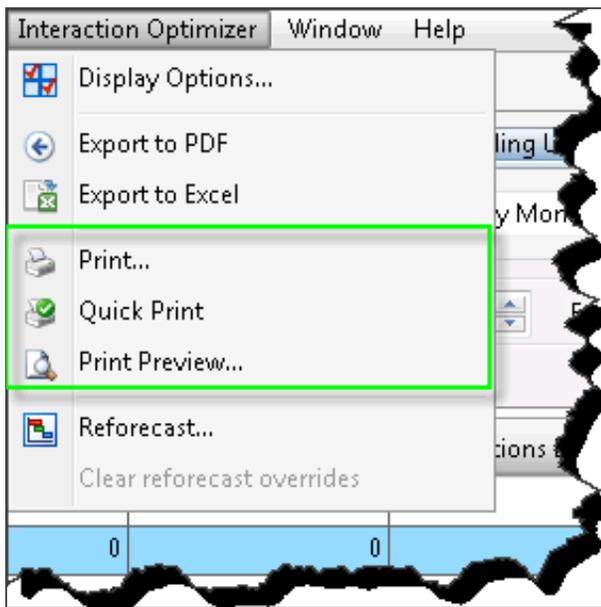
- **Time** (displayed by default): This is the 30 minute interval in the selected day.
- **Forecast Interactions** (displayed by default): This is the forecast number of interactions in the 30 minute time period.
- **Actual Interactions** (displayed by default): This is the actual number of interactions in the 30 minute interval.
- **Interactions Difference** (displayed by default): This is the difference between how many actual interactions there were and the number of interactions forecast in the 30 minute interval. For example, if the actual interactions value is "17" and the forecast interactions value is "13", the difference would be "4", meaning the actual number of interactions in the 30 minute interval is 4 more than the forecast number.
- **Reforecast Interactions**: This is the number of interactions that have been reforecast for the rest of the day. This reforecast is based on the trends in the sliding window (which defaults to the last 4 hours) combined with any changes made to the more advanced reforecast settings. For example, if the "Customer Service" workgroup has had 10% higher interaction volume in the last 4 hours and the service level has been dropped from 85% to 82% answered within 30 seconds, then the reforecast for the rest of the day will use these new values in its calculations.
- **Forecast AHT** (displayed by default): This is the forecast average handle time in seconds of interactions in the 30 minute interval.
- **Actual AHT** (displayed by default): This is the actual average handle time in seconds of interactions in the 30 minute interval.
- **AHT Difference** (displayed by default): This is the difference between the actual average handle time of interactions and the forecast average handle time of interactions in the 30 minute interval. For example, if the actual AHT value is "241.54" and the forecast AHT value is "299.00", then the difference would be "-57.46", meaning the actual average handle time of interactions in this 30 minute time period is about 1 minute less than the forecast average.
- **Reforecast AHT**: In general, this is the average handle time in seconds of interactions that will occur throughout the rest of the day, if the trend for the day continues exactly as it has. For example, if the actual AHT has been 10% more than forecast

AHT up to this point in the day, then the rest of the day's reforecast AHT is increased by 10%. See Reforecast Interactions above for more details about the reforecast concept.

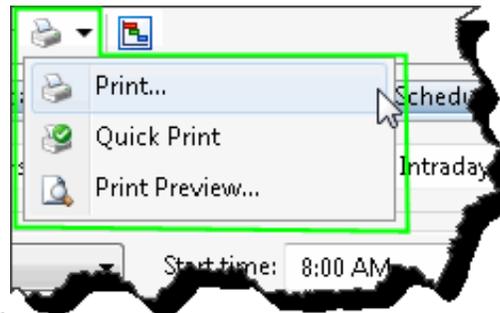
- **Forecast Average Interaction Time:** This is the forecast average time in seconds of an interaction in the 30 minute time period.
- **Actual Average Interaction Time:** This is the actual average time in seconds of an interaction in the 30 minute time period.
- **Average Interaction Time Difference:** This is the difference between the actual average time of an interaction and the forecast average time of an interaction and in the 30 minute interval. For example, if the actual average interaction time is "215.00" and the forecast average interaction time is "218.67", then the difference would be "-3.67", meaning the actual average handle time of interactions in this 30 minute interval is about 3½ seconds less than the forecast average.
- **Reforecast Average Interaction Time:** In general, this is the average interaction time in seconds in each 30 minute interval that will occur throughout the rest of the day, if the trend for the day continues exactly as it has. For example, if the actual average interaction time has been 10% more than the forecast average interaction time up to this point in the day, then the rest of the day's reforecast average interaction time is increased by 10%. See Reforecast Interactions above for more details about the reforecast concept.
- **Forecast Average ACW:** This is the forecast average time in seconds of after call work in the 30 minute interval.
- **Actual Average ACW:** This is the actual average time in seconds of ACW in the 30 minute time period.
- **Average ACW Difference:** This is the difference between the actual average time of ACW and the forecast average time of ACW in the 30 minute interval. For example, if the actual average ACW time is "58.50" and the forecast average ACW is "60.00", then the difference would be "-1.50", meaning the actual average ACW in this 30 minute time period is about 1½ seconds less than the forecast average.
- **Reforecast Average ACW:** This is the average ACW time in seconds that will occur throughout the rest of the day, if the trend for the day continues exactly as it has. For example, if the ACW time has been 10% more than the forecast ACW time up to this point in the day, then the rest of the day's reforecast ACW time is increased by 10%.
- **Forecast FTEs** (displayed by default): This is the forecast number of full time equivalent employees that are required to work in this 30 minute interval. For example, if you forecast 10 FTEs, this could be satisfied by 9 employees working the full 30 minutes while 2 employees work 15 minutes and take a break for 15 minutes. The last two employees would work a total of 30 minutes together which is one FTE.
- **Actual FTEs** (displayed by default): This is the actual number of full time equivalent employees that worked in the 30 minute interval.
- **FTEs Difference** (displayed by default): This is the difference between the number of full time equivalent employees that actually worked and how many full time equivalent employees forecast to work in the 30 minute time period. For example, if the actual FTEs were "10" and the forecast FTEs was "9", then the difference would be "1", meaning the forecast FTEs in this 30 minute interval is 1 employee less than the actual number of employees.
- **Reforecast FTEs:** This is the number of FTEs that are needed to work throughout the rest of the day, in order to meet the set service level or ASA goals. See Reforecast Interactions above for more details about the reforecast concept.

Note: The SL/ASA goals only impact Reforecast FTEs and can be called out separately.

- **Forecast Service Level:** This is the percentage of interactions forecast to be answered within the number of seconds configured for the service level objective. For example, if the system forecasts that 8 out of 10 calls will be answered within 30 seconds, then you will have a forecast service level of 80.
 - **Actual Service Level:** This is the actual percentage of interactions answered within the number of seconds configured for the service level objective.
 - **Service Level Difference:** This is the difference between the actual service level and the forecast service level.
 - **Reforecast Service Level:** This is the service level that is expected for the rest of the day based on the current published schedule, reforecast interactions and reforecast AHT. See Reforecast Interactions above for more details about the reforecast concept.
 - **Forecast ASA:** This is the forecast average speed of answer (ASA) in seconds in the 30 minute interval.
 - **Actual ASA:** This is the actual average speed of answer in seconds in the 30 minute interval.
 - **ASA Difference:** This is the difference between the actual average speed of answer and the forecast average speed of answer in the 30 minute interval. For example, if the actual ASA value is "9.33" and the forecast ASA value is "10.34", then the difference would be "-1.01", meaning the actual average handle time of interactions in this 30 minute time period is about 1 second less than the actual average.
 - **Reforecast ASA:** This is the average speed of answer that is expected for the rest of the day based on the current published schedule, reforecast interactions and reforecast AHT. See Reforecast Interactions above for more details about the reforecast concept.
4. To optionally print the information in the **data table** view, select one of the **Print** options from the Interaction Optimizer menu, or from the **Print** button on the toolbar.

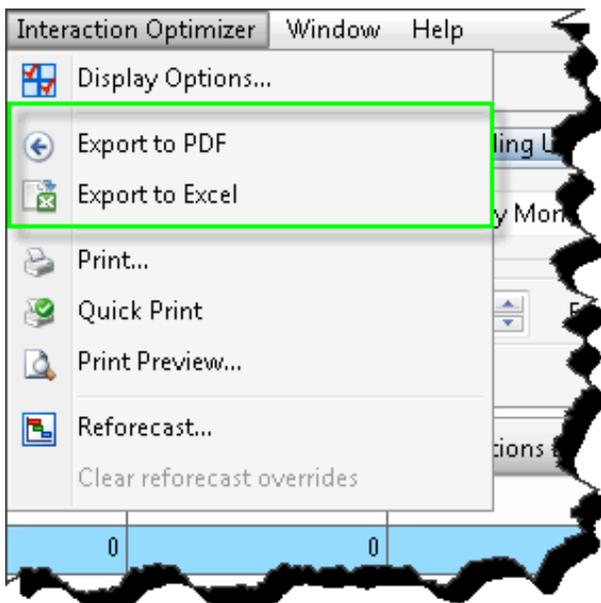


or

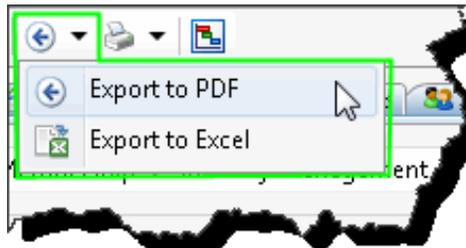


- **Print...** opens the Print dialog box where you can set additional print options.
- **Quick Print** sends the data directly to the default printer for printing.
- **Print Preview...** opens the Print Preview dialog box to see the image of the data.

5. To optionally export the information, select one of the **Export** options from the Interaction Optimizer menu, or from the **Export** button on the toolbar.



or



- **Export to PDF** sends the data to Adobe Acrobat (must be installed and licensed).
- **Export to Excel** sends the data to Microsoft Excel (must be installed and licensed).

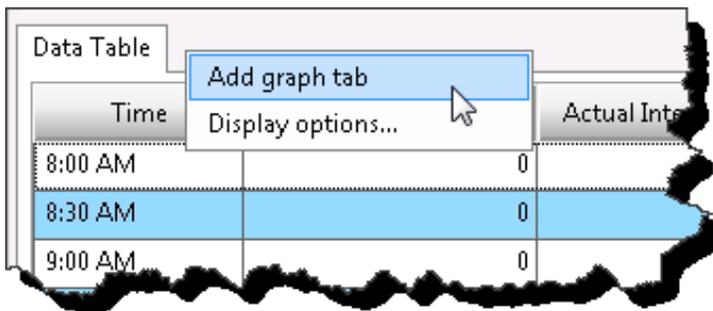
6. Display the data in [Graph View](#).

Use Intraday Monitoring in Graph View

You can use graph view to display the intraday monitoring information in one or more graph tabs. **Note:** You cannot calculate service levels or ASA on the CIC server.

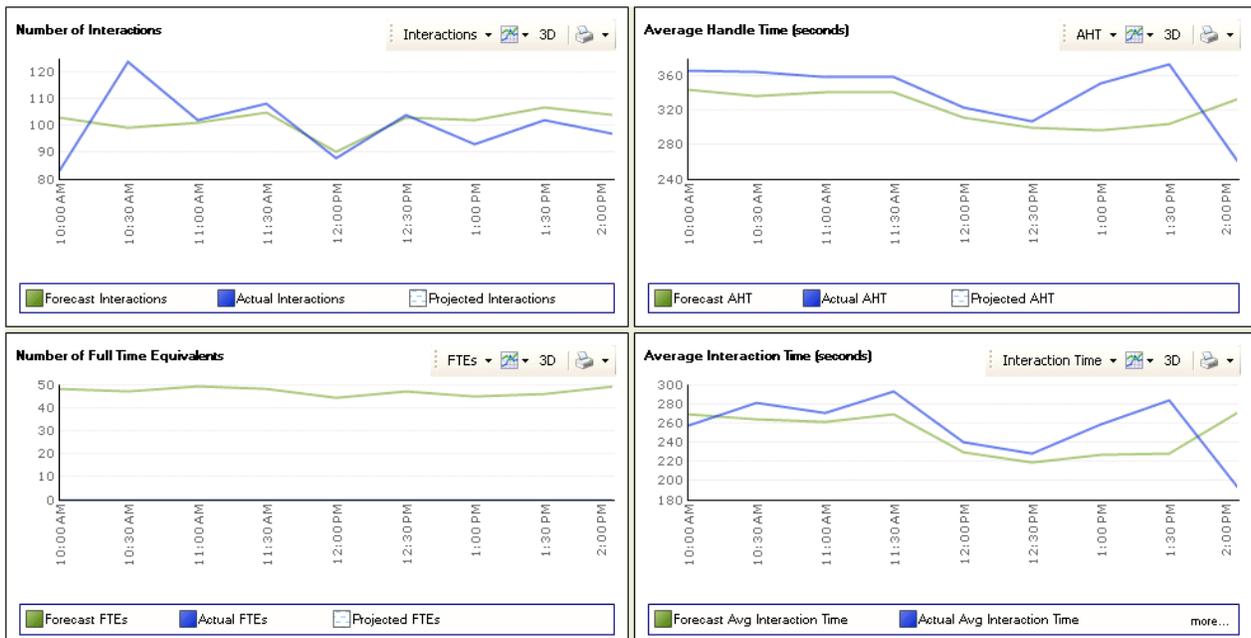
Add a graph tab to the Intraday Monitoring view

1. Next to the **Data Table** tab, right-click and select **Add graph tab** from the menu that appears.



2. View the intraday monitoring data in the displayed graphs. By default, the number of interactions, the average handle time (AHT) in seconds, the number of full time equivalents (FTEs), and the average interaction time in seconds data is displayed each in four 2-dimensional line graphs (see [Set Graph Tabs Display Options](#) to change the display).

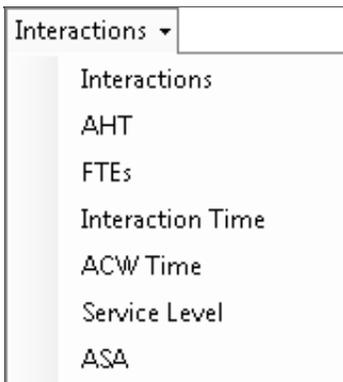
Tip: You can change the number of graphs and orientation (for two graphs) by right-clicking on any of the existing graphs and selecting Graph Count.



3. Do any of the following using the graph sub-menu:



- To select a different display option, click the graph data type drop-down list and select the data type. The default data type is **Interactions**.



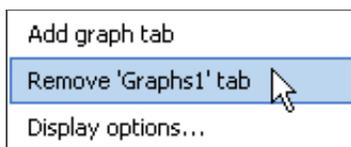
- To change the graph type to **Bar** or **Line**, click the graph type button. The default graph type is **Line**.
- To toggle between 2D and 3D, click the dimension button. By default, the graph is displayed in 2-dimensional view.

Tip: When viewing a 3D graph, you can rotate/spin the graph by holding down the [Alt] key and moving your mouse.

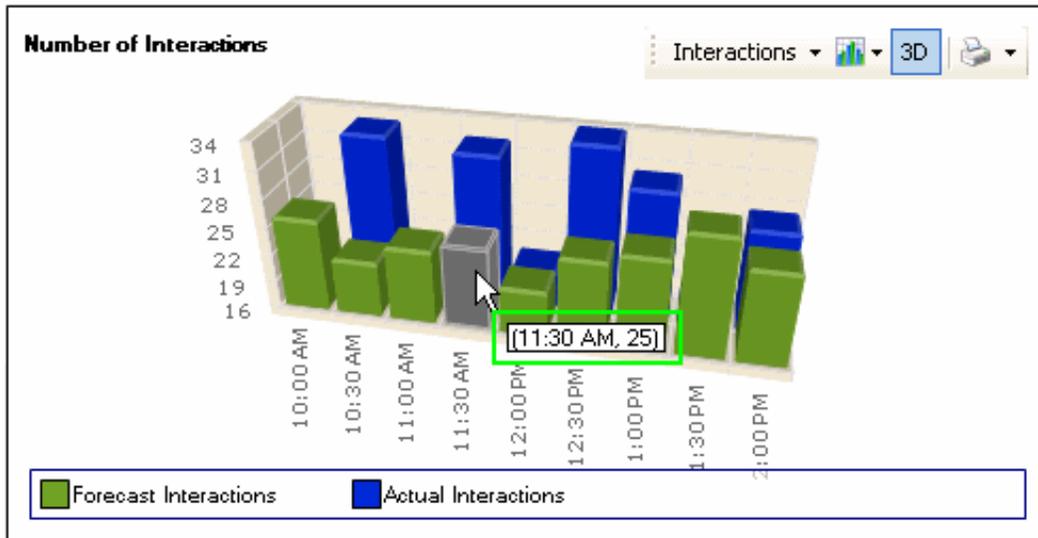
- To print the graph, click the print button to select a printing option.

Print...	Opens the Print dialog box where you can set additional print options.
Quick Print	Sends the data directly to the default printer for printing.
Print Preview...	Opens the Print Preview dialog box to see the image of the data.

- To remove a graph tab from the view, right-click the tab and select **Remove**.



- To display details of an element, hover your mouse over the desired data element .



Set Intraday Monitoring Display Options

You can use the intraday monitoring display options to configure how your table and graph data is displayed. You cannot calculate service levels or ASA on the CIC server.

This section includes:

- [Set Graph Tabs Options](#)
- [Set Graph Data Defaults](#)
- [Set General Display Options](#)
- [Select Columns to Display](#)

Set Graph Tabs Options

You can make changes to the tab name or the number of graphs for any graph tab, and you can also change the order of the tabs.

Change the graph tabs

1. Click the [Display Options](#) button. The **Intraday Display Options** dialog opens and displays the **Graphs** tab.
2. To change the graph tab name, click in the graph tab name area and type a new name.
3. To change the number of graphs displayed or how those graphs are displayed (orientation; available if you select 2 graphs), click on the arrow on under the **Number of Graphs** column.
4. To change the order of the graph tabs, highlight a graph name and click **Move Up** or **Move Down**.
5. To add a graph tab, click [Add](#).
6. To remove a graph tab, highlight a graph name and click **Remove**.
7. Click **OK** when you are finished making changes to the **Graph Tab** display options.

Tip: You can change the number of graphs and orientation (for two graphs) by right-clicking on any of the existing graphs and selecting **Graph Count**.

Set Graph Data Defaults

You can change the range of values displayed in the graphs for each of the types of data available.

Change the range of values

1. Click the [Display Options](#) button. The **Intraday Display Options** dialog opens and displays the **Graphs** tab.
2. Click the **Graph Data Defaults** tab.
3. To change the range of values on the Y axis, in the **Type of Data** column locate the value you want to change, and in the **Automatic** column select the check box.

Note: Selecting this check box displays the range of values lowest to highest. De-selecting, or turning off, this check box allows you to set a fixed range in the Minimum and Maximum value fields.

4. To set the minimum and maximum values, click in the **Minimum** and **Maximum** fields, then use the up and down arrows to set the values, or type the numbers you want.

- **Minimum:** This is the lowest value shown on the Y axis for graphs.
- **Maximum:** This is the highest value shown on the Y axis for graphs.

Note: These values may be slightly rounded.

5. To display a forecast for any data points during the current day that do not yet have actual data, select the **Reforecast** check box. Clear this check box to hide reforecast data.

Note: Reforecasts are not shown on the graphs when the selected date is not the current day since reforecasts are only done based on the current day's data.

6. Click **OK** when you are finished making changes to the **Graph Data Defaults** display options.

Set General Display Options

You can change the general behavior of the intraday monitoring data types, server offset, refresh values, and export folders. You cannot calculate service levels or ASA on the CIC server.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page](#) **Scheduling unit** drop-down list.

Change the general display options

1. From the **Interaction Optimizer Home** page, in the Intraday Management area click **Intraday Monitoring**. The **Intraday Monitoring** tab opens.
2. Open the **Interaction Optimizer** menu and select **Display Options**, or from the toolbar click the [Display Options](#) button.
3. Click the **General** tab to display it.
4. To change the **Server offset** in minutes, use the up and down arrow keys or type the desired value.

Note: The **Server offset** is the number of minutes to add to the client time to result in the server time. For example, if the client time is 10:00 am, and the server time is 11:00 am, then the server offset is 60 minutes.

5. To change the **Refresh frequency** in seconds, use the up and down arrow keys or type the desired value.

Note: The **Refresh frequency** is the number of seconds to wait before refreshing the intraday data.

6. To change the **Refresh offset** in seconds, use the up and down arrow keys or type the desired value.

Note: The **Refresh offset** is the number of seconds to wait after the beginning of the hour and refresh frequency before starting to refresh the intraday data. For example, if the **Refresh frequency** is set to 1800 seconds, and the **Refresh offset** is set to 120 seconds, then the data is refreshed 2 minutes and 32 minutes after the hour.

7. To change the **Sliding window** in minutes, use the up and down arrow keys.

Note: The **Sliding window** specifies which intervals to use when calculating the reforecast. It includes intervals starting from the last completed interval and goes back the number of minutes specified. The default value is 4 hours, and can be changed to whatever amount of time is appropriate for that scheduling unit. The sliding window only uses intervals that occurred on the current day, even though the maximum sliding window size is 24 hours. This means that if the sliding window goes back into the previous day, only intervals starting at 12:00am and later are used.

8. In the **Criteria granularity** area, select the type of data you want to select from on the Intraday Monitoring tab: **Service Goal Groups** or **Workgroups**.
9. To change the **Export folder** location, click **Browse** to set a different location. The **Export folder** location defaults to your temporary file location, which is typically in `C[local drive]:\Documents and Settings\[user name]\Local Settings\Temp\`.

Note: This is the folder where exported Adobe Acrobat PDF and Microsoft Excel files are saved.

10. To stop displaying the warning message when you remove a graph tab, select the **Do not ask before removing graph tab** check box.

Note: You can select **Do not show this message again** checkbox on the **Tab Removal Confirmation** message as well, to stop displaying the message.

11. To reforecast the rest of the day before each intraday monitoring refresh of data, select **Automatically reforecast before refresh**. The most recent reforecast will overwrite past reforecasts for all the intervals from the current interval to the end of the day. By default this option is turned on (selected). You can turn it off and choose to run a reforecast manually.
12. To direct the system to attempt to reach service level and ASA goals by the end of the workday, select the **Aim to reach the service level and ASA goals by the end of the day** check box.

Select Columns to Display

Use the **Column Selector** dialog box to control the columns that are displayed in a data table view.

Change columns displayed in the data table

1. Right-click in the data table space, and select **Choose columns...** from the menu that appears. The **Column Selector** dialog opens.
2. Do any of the following:
 - Select the columns to show or to hide, or select or clear the check box associated with the column to show or to hide. The column names that are checked are visible. Use the [Shift] and [Ctrl] keys to check or uncheck all of the selected columns at one time. For example, to display all columns, click the first column, hold down the [Shift] key and click the last column, and then click the **Show** button.
 - Select a column and click **Move Up** or **Move Down** to change the order of appearance.
 - Select **Relative size** (you can use the up and down arrows to set the size), or **Best fit** in the **Column Width** section to change the selected column's width in the data table view.

Note: The last two options can be changed when only one column is selected.

3. Select **OK** when you're done making changes and return to the data table view.

Tip: You can also drag and drop the column headers to change the order or width of the columns.

Real Time Adherence Overview

The **Real-time Adherence (RTA)** view monitors agents' adherence to the schedule at all times. It provides instant feedback and helps call centers maintain proactive control over agent schedules.

Note: Before you configure real-time adherence, select the appropriate scheduling unit from the **Interaction Optimizer Home page Scheduling unit** drop-down list.

This view identifies users who are in or out of adherence based on a variety of factors. It allows a call center manager to track current agent activity and presence, by comparing actual agent activity with the published schedule.

The display combines overview and agent details in one view. The top section of the view (RTA Overview) indicates how many users are in or out of adherence with the current schedule. This information is also presented in a chart control. The bottom section of the view (Agent Details) provides details about each individual agent's adherence to schedule.

Drop lists make it easy to choose a different Scheduling Unit or Workgroup. Selecting a different Adherence status or Exception type affects Agent Details only.

RTA statistics inform about agents who are currently scheduled. RTA statistics report scheduling unit, workgroup, status, scheduled activity, actual activity (based on status), adherence status, exception type, and adherence time for an agent.

Use the Real time Adherence Wizard

The **Real Time Adherence** wizard appears when you select **Real Time Adherence** from the **Intraday Management** area of the Interaction Optimizer home page. Pages in this wizard prompt for Interaction Optimizer Scheduling Unit, Workgroup, Adherence Status, and Exception Type.

Configure the Real-time Adherence view:

1. From the [Interaction Optimizer Home page](#), in the **Intraday Management** area click **Real-time Adherence**. The **Real-time Adherence Wizard** dialog opens.

Note: Use this wizard page to select an Interaction Optimizer Scheduling Unit. A *scheduling unit* is a collection of workgroups that are scheduled together.

2. Select the name of a scheduling unit and click **Next**. If many scheduling units are defined, you can type all or part of the name in the **Filter** box. The **Real-time Adherence Wizard - Workgroup** dialog opens.

Note: When more than 20 scheduling units exist in the system, only the first 20 are shown, and an indicator informs that more scheduling units are available. Once you click to select a scheduling unit, its name appears in the Scheduling Unit box. This helps verify your selection.

3. Select the name of a workgroup and click **Next**. If many are defined, you can type all or part of the name in the **Filter** box. The **Real-time Adherence Wizard - Adherence Status** dialog opens. Use this page to select whether to display agents who are in or out of adherence.

Note: When more than 20 workgroups exist in the system, only the first 20 are shown, and an indicator informs that more workgroups are available. Once you click to select a workgroup, its name appears in the Workgroup box. This helps verify your selection.

4. Select either **In Adherence** (with schedules), **Out of Adherence**, or **<All>** and click **Next**. The **Real-time Adherence Wizard - Exception Type** dialog opens. Use this page to select exception type to use as selection criteria. Possible values are Unknown, Early, Late, Unscheduled, Logged Out, or **<All>**.

Note: An exception occurs whenever an agent's actual activity does not match their scheduled activity. An agent can have an exception in 1 of 2 ways:

Case 1: When the scheduled activity changes but the agent's actual activity doesn't change.

Case 2: When the agent's status and actual activity changes but the scheduled activity doesn't change.

In theory, it is possible for both an agent's scheduled and actual activity to change at the same time; but in practice, that will rarely happen. Optimizer statistics track the "before" and "after" actual activity. For case 1, the actual activity before and after the scheduled activity change would be the same. For case 2, the "before" actual activity would be the actual activity before the status/activity change and the "after" actual activity would be the actual activity after the status/activity change.

The "before" and "after" actual activities are relevant to the exception type. When an exception occurs, the before and after actual activities are examined and compared to not only the scheduled activity but also the previous and next scheduled activities:

- If the before actual activity is the same as the previous scheduled activity, the exception is **Late**. The thought is that the agent is still doing what they were last scheduled to do and are late in changing to the new scheduled activity.
- If the after actual activity is the same as the next scheduled activity, the exception is **Early**. The thought is that the agent started doing what they are next scheduled to do before they are scheduled to do it.
- It is possible for both conditions to be true. In that case, the exception would be **Late**.
- If the before actual activity doesn't match the previous scheduled activity and the after actual activity doesn't match the next scheduled activity, then the exception is **Unscheduled**.
- If there is no exception (the scheduled activity and actual activity match), then the exception type is **Unknown**.

5. Click **Finish**. The [Real-time Adherence view](#) opens.

Working with Real time Adherence

The **Real-time Adherence (RTA)** view monitors agents' adherence to schedule at all times. It provides instant feedback and helps call centers maintain proactive control over agent schedules. This view identifies users who are in or out of adherence based on a variety of factors. It allows a call center manager to track current agent activity and presence, by comparing actual agent activity with the published schedule.

When people change status to activity mapping(now written as a view in ICBM optimizer administration plugin) the change is communicated to optimizer server to process RTA updates. It should be noted that the change is picked up only for the next update of the stats (say schedule changes or agent status changes) and existing report of adherence information will not be flushed out.

Change statistics in this view

1. **Right-click** any statistic to open a shortcut menu.
2. Choose **Select Statistics** from the menu that appears. The [Select Statistics dialog](#) appears. Use this dialog to select which statistics appear in the view.
3. The list on the left contains items that are not currently included in the view. The list on the right contains items selected for inclusion in the view.
 - Select statistics in the list on the left. Then click **Add** to move them to the other list. **Add All** selects all items for inclusion.
 - Use **Move Up** and **Move Down** buttons to optionally change the display order of columns in the view.
 - To exclude statistics from the view, select items in the list on the right. Then click **Remove**. The **Remove All** button excludes all statistics from the view, but at least one must be included.

4. Click OK when finished.

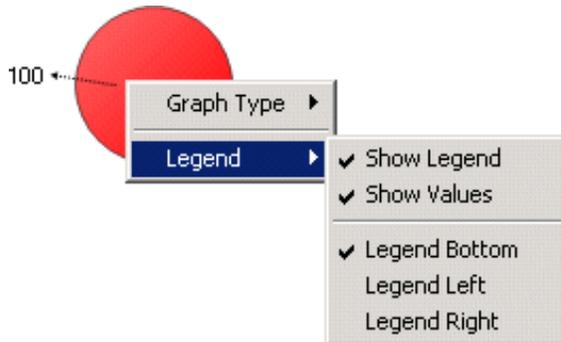
Customize the chart

The chart can be customized by:

- Right-clicking the chart control and selecting a new chart type (Pie, Column, or Bar).



- Right-clicking the chart control and selecting a new position for the legend relative to the chart. **Show Legend** toggles the legend itself on or off. **Show values** toggles display of current values next to each statistic in the legend.



Remove a category

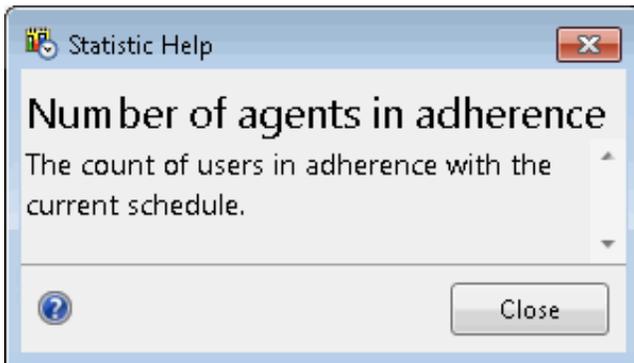
To remove a category column from the Agent Details section of the view, right click a column and select **Remove Category** from the shortcut menu.

Add a category

To add a category column to the Agent Details section of the view, right click a column and select **Add Category** from the shortcut menu. The [Select Statistics dialog box](#) opens, allowing you to select categories to appear in the view.

Display Help for a statistic

1. Right-click the statistic to display the shortcut menu.
2. Select **Help**. The description of the statistic appears in the **Statistic Help** dialog. For example, if you right-click the Percent of agents out of adherence statistic, the **Statistic Help** dialog appears for this particular statistic.



Note: If you want more information regarding statistics, click the Help button on the **Statistic Help** dialog. The *Interaction Supervisor* help opens.

Reforecasting Overview

Intraday Reforecasting complements Intraday Monitoring and adds the next level of functionality. While Intraday Monitoring allows supervisors to see how the forecast and actual values for the day differ, Intraday Reforecasting creates a new forecast based on the current trends for the day. The goal of Intraday Reforecasting is to provide more accurate information about how many agents are needed throughout the rest of the day to meet the desired service levels. This information is shown in the Intraday Monitoring area as well as in the schedule for the current week so it will be even easier to make changes to the current schedule and see how those changes will meet the reforecast requirements for the rest of the day.

Use Reforecasting in Intraday Monitoring

You can use reforecasting in intraday monitoring automatically and you can configure reforecasting to run on request. When reforecasting automatically, the reforecast is run before the intraday monitoring data is automatically reloaded, by default, every 30 minutes. If you choose not to reforecast automatically, then you can manually reforecast the remainder of the day either from the intraday monitoring section or from the [current week's schedule section](#).

Note: Before you use reforecasting, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

Use reforecasting in intraday monitoring

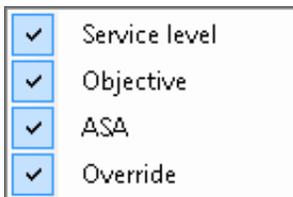
1. From the **Interaction Optimizer Home** page, in the Intraday Management area select **Intraday Monitoring**.
2. Do one of the following:
 - Open the **Interaction Optimizer** menu and select **Reforecast...**
 - Click Reforecast on the toolbar. The **Reforecast Settings** dialog box opens.
3. Do any of the following:
 - If you want to meet the service level and ASA goals by the end of the day, select the **Aim to reach the service level and ASA goals by the end of the day** check box. If you want to meet the service level and ASA goals per interval, leave this check box unchecked.
 - View the current configured service levels. The Service Level (under **Goals for entire day**) defaults to the value for the service level of that workgroup.
 - Override currently configured service levels by selecting the associated **Override** checkbox(es).

Note: You may decide to override the configured service level or ASA to adjust the interactions actually occurring that day. When you make this change, the dialog box shows what service levels are needed for the rest of the day. This information is based on the current total interactions for the day, and the reforecast number of interactions expected for the remaining part of the day.

For example, even though a workgroup normally handles interactions with a service level of 85% within 30 seconds, there could be a very high volume day where this service level is not attainable. You may notice that the morning service level for that workgroup is under 80% and decide that it would be acceptable to get a service level of at least 82% within 30 seconds for the day. When you make this adjustment, the dialog box may show that the needed future service levels for the rest of the day are 89% within 30 seconds, so that the overall service level for the day is 82% within 30 seconds.

Service levels overrides impact only to specific workgroups where the override is made. Uncheck the **Override** checkbox to return to and use the original values.

4. Click **Restore Defaults** to restore the defaults for the Reforecast Settings dialog box. Click **Clear Forecast Overrides** on the **Actions** menu to restore both the defaults for the **Reforecast Settings** dialog box *and* the **Advanced Reforecast Settings** dialog box.
5. Change columns that are displayed by right-clicking on any column header.



Service levels and service level objectives (labeled Objective) are displayed if forecasting is based on service level, ASA is displayed if forecasting is based on ASA. The service level or ASA data is visible in the **Values up to the current time**, the **Needed future values** and the **Goals for the entire day** columns defined as follows:

- **Values up to the current time:** Value that the service level has been starting at the earliest time when interactions started on the current day up to the last recorded interval.
 - **Needed future values:** Shows what service level (or ASA) must be hit for the next interval all the way to the end of the forecast intervals for the current day in order to meet the Goals for the entire day value. This value is recalculated every time the Goals for the entire day are changed.
6. Click **Advanced** to configure more reforecast options, or click **Restore defaults** to discard any changes and return to the original settings.
 7. Click **OK** when finished.

Note: The status bar in the lower left-hand side of the application displays a message saying either "Reforecasting using defaults" or "Reforecasting using overrides". When the status is "Reforecasting using defaults", then neither the reforecast settings nor the advanced reforecast settings have any overridden values. When the status is "Reforecasting using overrides", then there is one or more values from the reforecast settings or advanced reforecast settings that has been overridden. The tooltip on hover displays the most recent reforecast time.

Configure Advanced Reforecast Settings

You can configure the expected number of interactions, average interaction time, or average ACW time that is used to reforecast information for the rest of the day.

Configure advanced reforecast settings

- From the Reforecast Settings dialog box, click Advanced to open the Advanced Reforecast Settings dialog box.

Advanced Reforecast Settings

The data shown is for the current sliding window. If needed, change the 'Override % Change' values and check the 'Override' column for the desired data types and service goal groups. All changes will stay in effect for the rest of the day unless they are removed.

Number of Interactions

Service Goal Group	Forecast	Actual	% Change*	Override % Change	Override
80% answered within 60 second(s)	30.50	0.00	-100.00	-100	<input type="checkbox"/>

Average Interaction Time (seconds)

Service Goal Group	Forecast	Actual	% Change*	Override % Change	Override
80% answered within 60 second(s)	259.99	0.00	-100.00	-100	<input type="checkbox"/>

Average After Call Work Time (seconds)

Service Goal Group	Forecast	Actual	% Change*	Override % Change	Override
80% answered within 60 second(s)	48.15	0.00	-100.00	-100	<input type="checkbox"/>

* The '% Change' values are reduced during the first 2 hours of the day to prevent over-forecasting.

Restore defaults OK Cancel Help

- Do any of the following:

- Use the up and down arrows to set the percentage change in override of the default values of the service goal group. When you change the override, the **Override** checkbox is checked. The **Override % Change** value is used only when the **Override** checkbox is checked.

Override % Change	Override
-95	<input checked="" type="checkbox"/>
-100	<input type="checkbox"/>
-105	<input checked="" type="checkbox"/>
-70	<input checked="" type="checkbox"/>
-100	<input type="checkbox"/>

- Right-click the column headers and select to add columns or deselect to remove columns.

Service Goal Group	The name of the service goal group.
Forecast	The total of all values forecast for this service goal group during the sliding window time (default value is 4 hours)
Actual	The total of all actual values for this service goal group during the sliding window time.
% Change	The percent difference between the Forecast and Actual values during the sliding window time.
Override % Change	The last set value for the percent difference that is used when calculating reforecasts during the rest of the day if the override checkbox is checked. For example, if Override % Change is set to "5%" and the forecast for some service goal group during a future interval is 100 interactions, then the reforecast will use 105 interactions in its calculations. This value defaults to the rounded value of % Change .
Override	When checked, then the value of Override % Change is used to calculate the inputs for the reforecast. If unchecked, then the value of % Change is used to calculate the inputs for the reforecast.

- Click **Restore defaults** to clear the override checkboxes and set **Override % Change** values to the current value for **% Change**.

3. Click **OK** to save your changes and return to the **Reforecast Settings** dialog box.

Notes: This page allows you to make changes that steers the reforecast in the way you think is appropriate, however editing these inputs should not typically be necessary, since the system is gathering data throughout the day to determine how the interaction volume and average handle time is changing. These settings are handled at the service goal group level, so changes to one service goal group do not impact other service goal groups.

An example of when edits might be made: If an electric company has a major power outage, the forecast number of interactions for the service department may need to increase dramatically for a portion of the day. The system may take a few hours to catch up with this increased volume, but the administrator could act immediately to increase the interaction volume and reforecast for the next few hours.

Understanding adherence management

Adherence exceptions are calculated based on the current schedule and the agent's actual status at the time of the exception. If a workforce management administrator changes the schedule, Interaction Optimizer recalculates the adherence exception and, depending on the outcome, it may no longer appear. Excusing exceptions in the Adherence Exceptions view will change the schedule so that it matches actual agent work performed.

An agent's status setting is used to track his or her adherence to the published schedule. Adherence to the published schedule is defined as an agent's status being consistent with his or her currently scheduled activity. For example, if an agent is scheduled to be taking calls (Scheduled ACD) but his or her current status is "On Break," this difference from the schedule creates an adherence exception.

Adherence exceptions are the basis for the time out of adherence statistics for each agent. These statistics can be monitored in Interaction Supervisor. Supervisors can review and manage adherence exceptions. A supervisor can completely or partially excuse any adherence exception.

Adherence Management enables a supervisor to:

- Search for selected adherence exceptions
- Refresh the list of adherence exceptions to include the most recent events.
- Manage one adherence exception.
- Manage multiple adherence exceptions.
- Quickly excuse one or more adherence exceptions.

Users can no longer "unexcuse" exceptions from the adherence exceptions view. To "unexcuse" an adherence exception, administrators must edit the schedule to match the activity.

Note: When an agent changes his or her status to an activity type, the change is not reflected in the current adherence calculations. Interaction Optimizer Server receives the change and processes RTA updates for the next statistics update.

View adherence exceptions

The **Adherence Exceptions** tab is available from the Interaction Optimizer home page. In the Adherence Exceptions tab, you can:

- Select search options that control which adherence exceptions are displayed.
- Refresh the display to include the most recent adherence exceptions.
- Add or remove columns by right-clicking on a column heading. For more information, see [Add or remove view columns](#).
- Sort the table by clicking on column heading.

Access and view adherence exceptions

From the [Interaction Optimizer Home](#) page, in the **Intraday Management** area select **Adherence Exceptions**. The **Adherence Exceptions** tab opens. The **Adherence Exceptions** tab displays selected adherence exceptions for a single Scheduling Unit for a selected period of time.

Note: When you open the Adherence Management dialog box, it displays all of today's adherence exceptions for all agents belonging to the first Scheduling Unit to which you have access. Scheduling Unit access is configured in Interaction Administrator. Supervisors may have access to data for all or only some of the Interaction Optimizer scheduling units.

The available information about each adherence exception includes:

Agent	This is the user name of the Agent. The name shown here is the display name or, if the display name is not defined, the user name listed in Interaction Administrator.
Team	This is the team to which the agent belongs. Set up and assign teams in the Agent Details view.
Type	<p>This is the type of adherence exception.</p> <ul style="list-style-type: none"> • Early means that an agent started a scheduled activity early. • Late means that an agent did not start a scheduled activity on time • Unscheduled means the agent set a status during the adherence exception even though the agent was not required to work based on the schedule. • Skipped means an agent skipped all of a scheduled activity. <ul style="list-style-type: none"> Note: A "Skipped" adherence exception occurs when an agent's status does not change to match a scheduled activity at any time during its scheduled time. • Unknown means that the agent was logged out when the adherence exception occurred. Or it can mean the agent set a status that was completely unrelated to the scheduled activity.
Start End	These two columns display the date and time that the adherence exception began and ended.
Length	This is how long the adherence exception occurred, in minutes.
Scheduled Activity	This is the activity that was scheduled to take place when the adherence exception occurred.
Actual Activity	<p>This is the actual activity that occurred, based on the agent's status, before and after the adherence exception.</p> <p>Note: If an adherence exception occurs because an agent does not change his or her status when the scheduled activity changes, the activity before and activity after have the same values. For example, if an agent's activity should have been "Scheduled ACD" from 8:00 to 10:00 and "In a Meeting" from 10:00 to 10:30, but the agent did not change the status from "Scheduled ACD" at 10:00, the activity before and activity after both show "Scheduled ACD".</p>
Actual Statuses	This is the actual status the agent was in when the adherence exception occurred.
Adherence	<p>Adherence indicates the percentage of time the agent's actual activity type was equal to the scheduled activity type.</p> <p>Note: To direct Interaction Optimizer to consider all activities excluding ACD equally for adherence purposes, set the scheduling unit to select adherence exception settings and conformance calculations. For more information, see the Related Topics.</p>

Conformance	<p>Conformance essentially answers the question, “Did the agent work the right number of hours even though they might have been in the wrong activities during the day?”</p> <p>Conformance indicates the percentage of time worked for activities considered in conformance calculations compared to time scheduled for activities considered in conformance calculations.</p> <p>Example:</p> <p>Let's assume only ACD is counted in the conformance, and an agent is scheduled to work 6 hours of ACD activity for the day:</p> <ul style="list-style-type: none"> • If the agent works only 5 hours of ACD, his or her conformance is 83.33%. • If the agent works 6 hours of ACD, his or her conformance is 100%. • If the agent works 7 hours of ACD, his or her conformance is 116.67%.
Workgroup	The workgroup to which the agent belongs.

For more information on adherence exceptions, see the **Related Topics**.

Search for adherence exceptions

You can display selected adherence exceptions by filtering dates in the Adherence Exceptions tab. The Adherence Exceptions tab displays selected adherence exceptions for a single Scheduling Unit for a selected period of time.

Search for specific adherence exceptions

1. From the [Interaction Optimizer Home page](#), in the **Intraday Management** area select **Adherence Exceptions**. The Adherence Exceptions tab opens.
2. Do one of the following:
 - Use the left and right arrows next to the **Week of** area to navigate to the week that contains the exceptions you want to view.
 - Click the **Calendar** button and use the left and right arrows in the calendar header to display the desired range of dates.
3. To optionally narrow the search further by day:
 - Click the down arrow in the **Start** drop-down list and select the first day to include in the adherence exceptions.
 - Click the down arrow in the **End** drop-down list and select the last day to include in the adherence exception search.

For more information on adherence exceptions, see the **Related Topics**.

Refresh the list of adherence exceptions

You can update the table of adherence exceptions displayed in the Adherence Management tab at any time by doing one of the following:

- Click the [Refresh](#) button.
- Press **F5**.
- Right-click anywhere in the table of exceptions and select **Refresh** from the shortcut menu.

This retrieves all the latest adherence exceptions using the current values in the search parameters. For example, if you open the Adherence Management application in the morning and do not change the default settings, clicking the **Refresh** button retrieves all adherence exceptions for the current day, including those that occurred after you started the application.

Note: Only 1 week of data appears at one time. To see another week of data, use the left and right arrows to navigate to the desired week.

For more information on adherence exceptions, see the [Related Topics](#).

Excuse a all or part of a single adherence exception

You can review adherence exceptions one by one and mark them excused. You can also partially excuse an adherence exception.

Example: If an agent is late returning from a meeting, but you know the meeting took longer than scheduled, you can excuse the extra time spent in the meeting, but count part of the unreasonably long time the agent took to get back to work in the agent's time out of adherence statistics.

Excuse all or part of a single adherence exception

1. Select the adherence exception you want to excuse.
2. Click the [Excuse a single adherence exception](#) button. The [Excuse Exception dialog box](#) opens.
3. In the **Minutes to excuse** area, use the spin control to select the number of minutes you want to excuse.
4. Click the down arrow at the end of the **Activity** drop-down list and select the activity toward which to apply the excused minutes.
5. In the **Notes** field, optionally enter a reason for the adherence exception.
6. Click **OK** to save changes to this adherence exception.

Excuse adherence exceptions using default values

You can quickly excuse one or more selected adherence exceptions using the values set on the Scheduling Unit tab. For information on configuring default values, see [Select adherence exception settings and conformance calculations](#).

Excuse selected adherence exceptions

1. Do one of the following:
 - Select one adherence exception.
 - Select non-adjacent adherence exceptions by clicking the first adherence exception, then holding down **Ctrl** while clicking the ones you want to add to the selection.
 - Select a range of adherence exceptions by clicking the first one, then holding down **Shift** while clicking the last one in the range.
2. Click the [Excuse adherence exceptions using default values](#) button. This excuses the exception(s) and omits the total length of each adherence exception from the time out of adherence statistics for the appropriate agent or agents.

For more information on adherence exceptions, see the [Related Topics](#).

Time Off Planning Overview

Interaction Optimizer's time off planning features automates the process of approving time off requests, alleviating the time WFM administrators spend performing this task manually. It includes:

Note: Before you configure Time Off Planning, make sure you select the appropriate Scheduling unit from the [Interaction Optimizer Home page](#).

Link	Purpose
Accrual plans	Show the rate at which groups of agents receive more time off in specified activity codes and configure settings for when time off requests can be automatically approved or denied.
Time Off Plans	Manage the allotments of time off per staff type. Based on these settings, the processing engine automatically approves, waitlists, or denies time off requests.
Time Off Requests	Search for existing time off requests. Add, edit, cancel, approve or deny requests, based on scheduling unit and agent.

About automatic time off processing

When you create a time off plan, you set an allotment of time that will be automatically approved when an agent requests time off. You can set an automatically approved amount of time per day, per staff type, and per coverage group.

[Configure accrual rates](#) to show the rate at which groups of agents will get more time off in the specified activity code. [Create staff types](#) to group together agents with the same workgroups, interaction types, and skills. This grouping prevents time off from being granted to all agents of a particular type on the same day.

Based on the settings you choose in time off plans, accrual rates, and staff types, the processing engine places the time off request in one of the following states.

Click the state to see a detailed explanation of its automatic processing conditions and requirements:

Approved

In order for the processing engine to automatically approve a time off request and place it in the approved state, the agent and the request must meet the following conditions.

An agent who submits a time off request must:

Belong to a scheduling unit and a coverage group when the processing engine processes the time off request.

Be associated with a valid accrual plan for the activity code the agent selects in the time off request.

Have enough accrued hours to be eligible for the requested time off.

Have enough accrued hours to accommodate any previously approved time off requests for a future date.

In addition, to the agent conditions, the time off request must meet the following requirements for automatic approval:

All the days in the time off request must be included in an active time off plan.

The accrual plan must be configured to allow automatic approval.

The days in the time off request cannot be a designated blackout day from the time off plan.

Enough allotments, based on length of time off request, should exist on the particular day of time off request based on coverage group. The system makes this calculation by looking at assigned allotments and subtracting approved time off requests for agents who belong to the same coverage group. This is only required if the accrual plan counts towards allotment.

Note: When an agent submits a time off request, and the agent belongs to an accrual plan that does not count toward allotment, the request is bypassed for automatic approval checks. For example, if an accrual plan for Jury Duty is not counted towards allotments, then the time off request could be auto-approved even if no allotments remain for that day.

If the time off request meets the above requirements, the processing engine automatically approves the request.

Pending

In Interaction Optimizer, time off requests in a pending state are considered to be waitlisted.

The processing engine places a time off request in the pending state if the request is still being processed and confirmation of eligibility for approval has not been confirmed. A time off request may be placed in pending status if:

No active time off plan exists in the system.

An agent does not belong to a scheduling unit or coverage group at the time the request is processed.

An agent has not accrued enough time off hours, based on the configured reference date, but the waitlist capping hours still remain on the time off accrual plan.

The time off request contains an activity code not defined in the agent's accrual plan.

The agent's accrual plan is not configured to automatically approve time off requests.

The time off request does not meet allotment availability, but enough time remains in the accrual plan's waitlist capping setting.

An agent has accrued enough hours at the time the request is submitted, but that request would invalidate any previously approved time off requests for a future date.

Denied

In some cases, the processing engine automatically denies a time off request. The potential for automatic denials is only available if your site uses the time off planning feature. If you do not use time off planning, automatic denials are unavailable.

A time off request may be automatically denied if:

A time off request is not spanned by an active time off plan during any portion of the request. An agent must submit a time off request during a period where an active time off plan exists. A time off request can span multiple active and adjacent time off plans.

The agent who submits the time off request does not have enough accrued hours. If the accrual plan requires that the accrual balance be large enough at the time of the submission and the accrual balance is less than the number of hours in the time off request, the request will be waitlisted or denied. If the accrual plan requires that the accrual balance be large enough at the start of the time off request, the system will calculate how many hours will be added to the accrual balance before the time off request starts. If the accrual balance will not be high enough, the request will be waitlisted or denied. The system determines whether to waitlist or deny the request based on the waitlist cap settings on the accrual plan.

A lack of enough accrued hours and failing the waitlist cap check happens, based on the time that the request was submitted.

The time off requests includes any full or multiple days that fall on a black out date, and the request is submitted by an agent whose accrual plan count towards allotment.

A request exceeds the allotment and waitlist cap settings as defined on the accrual plan.

If the agent does not have enough accrued hours, the processing engine denies the request.

For more information, see the **Related Topics**.

Accrual plan overview

Accrual planning helps administrators calculate and track an agent's earned or projected time off benefits. In Interaction Optimizer, accrual plans show the rate at which groups of agents receive more time off in specified activity codes.

Note: An agent can only belong to accrual plans that do not share activity codes. See the following example:

Time Off Plan	Activity Code
Plan 1	Vacation
Plan 2	Jury Duty
Plan 3	Sick Jury Duty

In the above scenario, Plans 2 and 3 both include the Jury Duty activity code. Agent A can only belong to Plan 1 and *either* Plan 2 or Plan 3.

To view and access the list of accrual plans from the Interaction Optimizer Home page, in the Time Off Planning area select Accrual Plans. On this tab, you can:

- [Create and define accrual plans](#)
- [Edit accrual plans](#)
- [Rename accrual plans](#)
- [Make a copy of an existing accrual plan](#)
- [Copy the accrual plan to another scheduling unit](#)

Create an accrual plan

Create an accrual plan to define the rate at which groups of agents receive more time off in specified activity codes, define permissions and restrictions, and set up approval options.

Note: Accrual plans use reference dates to calculate which rate at which the agent accrues hours. Only agents with reference dates are eligible for an accrual plan. You can either copy the hire date to the reference date, or you can manually enter it when you select eligible agents.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Accrual Plans** link. The **Accrual Plans** tab opens.
2. Click the **add** button. The **Create New Accrual Plan** dialog box opens.
3. Enter a descriptive name for the accrual plan and click the **OK** button. The accrual plan's configuration page opens.
4. [Configure the new accrual plan.](#)

Configure an accrual plan

After you create an accrual plan, configure the plan's permissions and restrictions, approval options, accrual rates, automatic processing settings, eligible activity codes, and selected agents for the plan.

Accrual plans use reference dates to calculate which rate at which the agent accrues hours. Only agents with reference dates are eligible for an accrual plan. You can either copy the hire date to the reference date, or you can manually enter it when you select eligible agents. The application server updates the agent accruals for all agents at midnight.

Note: This topic assumes you have [created a new accrual plan](#) or have chosen to [edit an existing accrual plan](#) and have opened the accrual plan's configuration page.

1. Configure the accrual plan's **general settings**:
 - a. In the **Plan Name** field, optionally update the accrual plan name.
 - b. To ensure the time off request is applied to the plan's daily allotment, select the **Counts against allotment** check box. For example, assume you set the time off allotment on June 1 to an amount of hours equal to 5 agents taking a full-day off. Then you select the **Counts against allotment** check box for the **Vacation** accrual plan, but *do not* select it for the **Jury Duty** accrual plan. In this scenario, if Agents 1 through 5 take a vacation day on June 1st, then Agent 6 is still permitted to take the day as time off for **Jury Duty**.
 - c. To allow agents permission to request time off against this plan, select the **Agents can request time off** check box.
2. In the **Accrued Hours Capping** area, configure capping calculations:

Note: Capping hours annually is typically used to manage rollover hours. For example, to specify that agents can only roll over one week of vacation to the next year. This feature does not cap the amount of accruals you can add during the year, but it does cap the accrual balance on one specific day each year.

- a. To place a cap on the number of hours an agent can accrue, select the **Cap accrued hours at** check box, and in the box next to it enter the maximum hours allowed under this plan.
 - b. To cap hours annually:
 - i. Select the **Once a year, cap accrued hours at** check box and enter the maximum hours allowed yearly under this plan.
 - ii. In the **Recurring yearly on** drop-down lists, select the month and year at which to cap the allowed hours.
3. In the **Waitlist Capping** area, configure any of the following waitlist capping calculations:

Note: The system combines the selected options in this area.

- To allow agents on a waitlist for only the currently accrued hours, select the **Currently accrued hours** check box.
 - To allow agents on a waitlist for the planned hours remaining in a time off plan, select the **Planned accrual hours for the rest of the current time off plan** check box.
 - To allow agents on a waitlist for additional, unplanned hours, select the **Extra hours** check box and in the box next to it enter the maximum number of hours an agent can choose.
4. In the **Automatic Processing of Time Off Requests** area, select one of the following automatic processing defaults:
 - Agent must have enough accrued hours prior to time off period for automatic approval
 - Agent must have enough accrued hours at request submission time for automatic approval
 - No automatic processing of time of requests
 5. In the **Accrual Plan Rates** area, [set up the accrual plan rate](#):
 - a. Click the **add** button. The **Accrual Plan Rates** dialog box opens.
 - b. Use the up and down arrows to select the number of **Accrual hours** to add in the period.
 - c. Select the arrow at the end of the **Accrual period** drop-down list and choose the length of time in the accrual period. This option defines how frequently hours are added to the accrual balance.
 - d. Use the up and down arrows in the **Up to duration** box to select the numerical duration length of the plan. This determines how long the accrual rate will be in effect. For example, if you select up to 2 years, then this accrual rate will be used any time after the previous rates up to 2 years. After two years, this rate will no longer apply.
 - e. Select the **Up to period** drop-down list and select the duration length of days, weeks, months or years.
 - f. Click the **OK** button. The configured rate appears in the Accrual Plan Rates grid.
 - g. In the Accrual Plan Rates area, to specify an accrual rate to use when the rate or rates set in the Accrual Plan Rates grid are no longer valid, do the following:
 - i. In the Continued accrual hours field, enter the number of hours to accrue after the configured rate expires.
 - ii. Click the Continued accrual period drop-down list and select the continued accrual period.

Example: Let's assume you have an accrual plan in the grid with an **Up to duration** of 6 years. If you set the **Continued accrual hours** to 80, and the **Continued accrual period** to Yearly, then after 6 years until the agent is no longer employed he or she will receive 80 vacation hours per year.
 6. In the **Activity codes** area, select the check boxes next to the activity codes to include in the accrual plan.
 7. In the [Accrual Rates for Selected Agents](#), choose the eligible agents for the plan:
 - a. Click the **add** button. The **Select Agents** dialog box opens.
 - b. Check the box to the left of the agent or agents you want to include in the plan.
 - c. To resolve any Reference Date discrepancies, click the **Copy start date(s) to reference date(s) which have not been set link**, or manually enter reference dates in the appropriate agent's **Reference Date** field.
 8. Click **OK** to return to the accrual plan configuration.

Define accrual period dates

An accrual period is a set interval of time calculated with configured plan rates to determine an agent's available time off accrual balance.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Accrual Plans** link. The **Accrual Plans** tab opens.
2. In the upper right side of the page, click the **Define accrual period rates** button. The Define Accrual Period Dates dialog box opens.
3. For a weekly accrual period, in the **Weekly Accrual Period** area use the drop-down list to select a day of the week in which to apply accruals.
4. For a biweekly accrual period, in the **Biweekly Accrual Period** area do one of the following:

Note: The system increases the accrual balance every other week on the day of the week that matches the selected reference date.

- Use the drop-down list to select a reference month and date at which the accrual period should begin
 - To set the reference date to the current date, click the **Set reference date to today** link
5. For a semi-monthly accrual period, in the **Semimonthly Accrual Period** area, use the drop-down lists to select the first and second days of the month to apply accruals.
 6. For a monthly accrual period, in the **Monthly Accrual Period** use the drop-down list to select the day of the month to apply accruals.
 7. For a yearly accrual period, in the **Yearly Accrual Period** area do one of the following:
 - Use the drop-down lists to select a month and year as the reference date
 - To set the reference date to the current date, click the **Set reference date to today** link
 8. Click the **OK** button.

Set up accrual plan rates

Set up the rates for the current accrual plan. The system increases the accrual balance every other week on the day of the week that matches the selected reference date.

Note: This topic assumes you have [created a new accrual plan](#) or have chosen to [edit an existing accrual plan](#) and have opened the accrual plan's configuration page.

1. From the accrual plan's configuration page, in the **Accrual Plan Rates** area click the [add](#) button. The **Accrual Plan Rates** dialog box opens.
2. In the **Accrual hours** area, use the up and down arrows to select the number of accrual hours allowed in a period.
3. In the **Accrual period** area, select the arrow at the end of the accrual period drop-down list and choose the length of time in the accrual period. This option defines how frequently hours are added to the accrual balance.
4. In the **Up to duration** area, use the up and down arrows to select the numerical duration length of the plan. This determines how long the accrual rate will be in effect. For example, if you select up to 2 years, then this accrual rate will be used any time after the previous rates up to 2 years. After two years, this rate will no longer apply.
5. Select the **Up to period** drop-down list and select the duration length of days, weeks, months or years.
6. Click the **OK** button.
7. In the **Accrual Plan Rates** area, to specify an accrual rate to use when the rate or rates set in the **Accrual Plan Rates** grid are no longer valid, do the following:
 - a. In the **Continued accrual hours** field, enter the number of hours to accrue after the configured rate expires.
 - b. Click the **Continued accrual period** drop-down list and select the continued accrual period.

Example: Let's assume you have an accrual plan in the grid with an **Up to duration** of 6 years. If you set the **Continued accrual hours** to **80**, and the **Continued accrual period** to **Yearly**, then after 6 years until the agent is no longer employed he or she will receive 80 vacation hours per year.

8. Click the [save](#) button.

Select agents to include in the accrual plan

Select the agents you want to include in the accrual plan. Accrual plans use reference dates to calculate which rate at which the agent accrues hours. Only agents with reference dates are eligible for an accrual plan. You can either copy the hire date to the reference date, or you can manually enter it when you select eligible agents.

Note: This topic assumes you have [created a new accrual plan](#) or have chosen to [edit an existing accrual plan](#) and have opened the accrual plan's configuration page.

1. From the accrual plan's configuration page, in the **Accrual Rates for Selected Agents** area, click the [add](#) button. The **Select Agents** dialog box opens.
2. Check the box to the left of the agent or agents you want to include in the plan.
3. To resolve any Reference Date discrepancies, do one of the following:
 - To use the agents' start date as the reference date, click the **Copy start date(s) to reference date(s) which have not been set link**
 - To use a date other than the agent's start date, manually enter it in the appropriate agent's **Reference Date** field.
4. Click the **OK** button and then click the [save](#) button.

Edit an accrual plan

This topic assumes you have already [created a new accrual plan](#).

1. From the Interaction Optimizer Home page, click the **Accrual Plans** link.
2. On the **Accrual Plans** tab, do one of the following:
 - Click the [Edit accrual plan](#) button.
 - Double-click the accrual plan you want to configure.
 - Select the accrual plan to edit and press **Enter** on your keyboard.

The accrual plan's configuration page opens.

3. [Change or update the accrual plan.](#)

Rename an accrual plan

In the Rename selected accrual plan dialog box, you can change the name of the selected plan. This dialog box also displays the date that the accrual plan configuration was last modified, as well as the name of the person who made the update.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Accrual Plans** link. The **Accrual Plans** tab opens.
2. Select the accrual plan you want to rename and click the [rename](#) button. The **Rename selected accrual plan** dialog box opens.
3. Enter the updated accrual plan name and click **OK** to return to the Accrual Plans tab.

Make a copy of an existing accrual plan

You can copy an existing accrual plan, then rename and optionally modify the configuration to your requirements.

Note: This action copies the agents to the new accrual plan, but does not copy any activity codes from the original accrual plan.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Accrual Plans** link. The **Accrual Plans** tab opens.
2. Select the accrual plan you want to copy and click the [copy](#) button. Interaction Optimizer adds the "Copy of [accrual plan]" to the list of plans.
3. Double-click the copied plan to [rename it or modify the configuration settings](#).

Copy an accrual plan to another scheduling unit

You can copy an existing accrual plan to another scheduling unit, then rename and optionally modify the configuration to your requirements.

Note: This action copies all activity codes from the original accrual plan, but does not copy any agents from the original plan. Because an agent can only belong to one scheduling unit at a time, you cannot copy agents from one scheduling unit to another.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Accrual Plans** link. The **Accrual Plans** tab opens.
2. Select the accrual plan you want to copy and click the [copy to another scheduling unit](#) button. The **Select Scheduling Units** dialog box opens.
3. In the **Scheduling Unit Name** area, select the scheduling unit or units to which to copy the accrual plan and click **OK**. A message appears, informing you that the plan was successfully saved to the new scheduling unit.
4. Click **OK**.

You can open the accrual plan in the new Scheduling Unit and optionally [rename it or modify the configuration settings](#).

View agent accruals

From the Agent Accruals dialog box, you can view agent accrual information and scheduled or processed time off requests. The Agent Accruals dialog box displays how many hours an agent has accrued or will accrue in the future, scheduled time off requests, and time off hours taken.

Use the Start Date and End Date fields to select the accrual information you want to view. If the selected date range overlaps the current date, the Accrued Balance is calculated on the current date.

Access the Agent Accruals dialog box from the Accrual Plans tab or from a time off plan's allotment editor:

Access the Agent Accruals dialog box from the Accrual Plans tab

1. From the **Interaction Optimizer Home** page, in the **Time Off Planning** area select **Accrual Plans**. The Accrual Plans tab opens.
2. Open the **Interaction Optimizer** menu and select **View Agent Accruals**.

Access the Agent Accruals dialog box from the Time Off Planning area

from the Interaction Optimizer menu in the Time Off Plans tom

1. From the **Interaction Optimizer Home** page, in the **Time Off Planning** area select **Time Off Plans**. The Time Off Plans tab opens.
2. Double-click the desired time off plan. The time off plan's allotment editor opens.
3. Open the **Interaction Optimizer** menu and select **View Agent Accruals**.

About the Agent Accruals column information

Accrued balance: The number of hours an agent has accrued. If the date range is in the past, the value is "<Not applicable>". If the date range includes the current day, the value shows the current accrued balance. If the date range is for the future, the value shows the expected accrued balance on the start date for the date range. This value starts with the current accrued balance, subtracts all approved time off requests before the start date, and adds hours to be accrued before the start date.

Scheduled: The number of hours scheduled in the future. If the date range is in the past, the value is "<Not applicable>". If the date range includes the current day, the value is the sum of all approved time off requests from today to the end date. If the date range is the future, the value is the sum of all approved time requests during that time range.

Unscheduled: The difference between accrued balance and scheduled hours. If the date range is in the past, the value is "<Not applicable>". If the date range includes the current day or is in the future, this value is calculated by subtracting the scheduled from the accrued balance.

To be accrued: The number of hours to be accrued in the future. If the date range is in the past, the value is "<Not applicable>". If the date range includes the current day, the value is the number of hours to be accrued between the current day and the end date. If the date range is in the future, the value is the number of hours to be accrued during the entire date range. This value does not subtract any approved time off requests.

Taken: The number of hours of approved time off requests taken in the past. If the date range selected is completely in the past, the taken value includes all approved requests during that date range. If the date range includes the current day, the taken value includes all approved requests up to yesterday. If the date range is all in the future, the taken value is "<Not applicable>".

Time off planning with the allotment editor

A time off plan allows administrators to set an allotment of time off that the system automatically approves when agents request time off. You can set an allotment per day, per staff type, and per coverage group. To access the allotment editor, create a new time off plan or [edit an existing one](#). The allotment editor opens.

In the allotment editor, you can perform these tasks:

- [Modify a time off plan's allotment](#)
- [Set up a representative schedule](#)
- [Change time off plan display options](#)
- [Import predicted staff](#)

Interaction Optimizer menu options

In addition to the tasks described above, you can open the Interaction Optimizer menu and select:

- **View Capped Days** to view capped days per staff type and coverage group
- **Export to Excel** to export allotment values per day, staff type, and coverage group to an Excel spreadsheet
- **Import from Excel** to import allotment values per day, staff type, and coverage group from an Excel spreadsheet
- **Activate time off plan** to activate the plan. Before activation, Interaction Optimizer may prompt you to save any unsaved changes. If another active time off plan overlaps any dates in the plan being activated, you will be asked if you want to proceed. If you proceed, the other time off plan will be de-activated and your time off plan will become the active plan.
- **View Agent Accruals** to view agent accrual balances and scheduled or processed time off requests.

Graph display options

When you open the allotment editor for a time off plan, three groups appear in expandable panels on the left side of the screen:

- **Day.** Select the days to show on the allotment editor graph. For example, if your agents only work Monday through Friday, clear the Sunday and Saturday check boxes to prevent them from appearing on the graph.
- **Graph.** All graphs are measured in either hours or FTEs based on a display option. Select the check box next to one or more parameters to include in the graph:

Parameter	Description
Allotment	The amount of time off the system will automatically approve
Predicted Staff	The system obtains this information from the imported predicted staff and represents the total expected available staff if no one takes time off
Approved Time Off	The total time off requests, in hours, or FTEs in approved status
Time Off Remaining	The total amount of time off awaiting approval before the plan ends—the total amount of time for all accrual balances for all agents in the scheduling unit minus the amount of time off requests approved. As time off requests are approved throughout the plan, this amount reduces.
Allotment Remaining	The total amount of time off available for automatic approval. The allotments for each day are subtracted from this value. For example, if 3650 FTEs of allotment remain on January 1 and that day has 10 FTEs of allotment, the Allotment Remaining on January 2 will be 3640.

Note: Click the colored bar next to any graph parameter to change its color on the graph.

- **Staff Type and Coverage Group.** The graph shows the total values across all checked staff types and coverage groups. After you select a representative schedule, you can pick some, but not all of the coverage groups. Before selecting a representative schedule, you can only pick one coverage group at a time or you can select all coverage groups from all staff types.

Graph Area

On the graph, red lines mark today's date. Use the Start Date and End Date to change the range shown on the graph. Below the graph, use the Week, Month, Future, and Full Plan buttons to modify the time period in the graph.

Data point grid

Below the graph, Interaction Optimizer displays a row for each data point in the selected area of the graph.

The allotment cap is used to protect a day from every having a higher allotment than the allotment cap. For example, let's assume you set the allotment cap to 5 on January 1st. If you create a modification that increases everything in January by 30% and subsequently increases the allotment for January 1st from 5 to 7, the allotment is only set to 5.

Here, you can:

- Click the **Modify Allotment** button to change the allotments shown in the grid.
- Click the fields in the **Allotment values** and **Allotment Cap values** to edit them.

Note: If you attempt to set an allotment higher than the allotment cap, the value will be set equal to the allotment cap.

- Select the check box the "Blackout Day" column to make that day a blackout day.

Note: Because no plan allows time off on a blackout day, the system automatically denies requests made on blackout days.

Edit a time off plan

This topic assumes you have already created a new time off plan.

1. From the Interaction Optimizer Home page, click the **Time Off Plans** link.
2. On the **Accrual Plans** tab, do one of the following:
 - Click the [Edit time off plan](#) button.
 - Double-click the accrual plan you want to configure.
 - Select a time off plan and press **Enter** on your keyboard.

The time off plan's allotment editor opens.

3. [Change or update the accrual plan.](#)

Activate a time off plan

To make a time off plan active:

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Plans** link. The **Time Off Plans** tab opens.
2. Select the time off plan you want to activate and click the [Activate time off plan](#) button.

Interaction Optimizer returns to the Time Off Plans page, and a check mark appears in the time off plan's Active column.

Rename a time off plan

In the Rename time off plan dialog box, you can change the name of the selected plan. This dialog box also displays the date that the time off plan configuration was last modified, as well as the name of the person who made the update.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Plans** link. The **Time Off Plans** tab opens.
2. Select the time off plan you want to rename and click the [rename](#) button. The **Rename Time Off Plan** dialog box opens.
3. Enter the updated time off plan name, and optionally, the description, and click **OK** to return to the Time Off Plans tab.

Make a copy of an existing time off plan

You can copy an existing time off plan, then rename and optionally modify the configuration to your requirements.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Plans** link. The **Time Off Plans** tab opens.
2. Select the time off plan you want to copy and click the [copy](#) button. Interaction Optimizer adds the "Copy of [accrual plan]" to the list of plans.
3. Double-click the copied plan to [rename it](#) or [modify the allotment settings](#).

Modify a time off plan's allotment

In the Modify Allotment dialog box, you can apply modifications only to the dates you select. This feature allows you to immediately see how your proposed changes will affect the plan by displaying the differences in the Allotment and New Allotment columns.

Note: This topic assumes you have created a new time off plan or have chosen to [edit an existing time off](#) and have opened the time off plan's allotment editor.

1. From the allotment editor, click the **Modify allotment** button. The Modify Allotment dialog box opens.
2. In the **Modification** drop-down list, select the method you want to use to change the allotment or allotment cap. Choose from:
 - Set Value
 - Modify Value
 - Set Allotment Cap
 - Clear Allotment Cap
 - Set allotment to percent of predicted staff

Note: Depending on the option you choose, additional calculation parameters appear next to the selection.

3. Select or clear the check boxes next to the dates to which you want to apply allotment.
4. Click the **OK** button. Interaction Optimizer reflects your changes in the time off plan's allotment editor.

Set up a representative schedule

A representative schedule should represent a normal week, and it could be a recent schedule. Interaction Optimizer uses this schedule to divide the weekly totals from the Import Predicted Staff dialog box into staff types and coverage groups per day.

After you select a schedule, in the allotment editor's display options, you can optionally select to allow multiple staff types, and any changes made are distributed according to the ratios in the representative schedule. However, if you selects the Modify Value by percent modification, the distributed value is included in the staff types.

Note: This topic assumes you have created a new time off plan or have chosen to [edit an existing time off](#) and have opened the time off plan's allotment editor.

1. From the allotment editor, open the **Interaction Optimizer** menu and choose **Set Representative Schedule**. The Representative Schedule dialog opens.
2. In the **Select a schedule to represent a normal week**, choose a recent and typical schedule.
3. In the **Distribution from selected schedule (in hours)** area, optionally change any coverage group hours so the ratios between coverage groups and days will be correct.
4. Click **OK** to return to the time off plan's allotment editor.

Download the predicted staff template

From the **Import Predicted Staff** dialog box, you can download a template in which to add FTE numbers for the number of agents predicted to work each week. Modifying the pre-defined format settings in the template may prevent the predicted staff values from being imported properly.

Note: This topic assumes you have created a new time off plan or have chosen to [edit an existing time off](#) and have opened the time off plan's allotment editor.

1. From the allotment editor, open the **Interaction Optimizer** menu and choose **Import Predicted Staff**. The **Import Predicted Staff** dialog box opens.
2. Click the **Download predicted staff template** file button and save the template to the desired location.
3. Modify the new file without changing the pre-defined format settings and save it for future use.

You can now select this file when you [import predicted staff](#).

Import predicted staff

In the Import Predicted Staff dialog box, you can upload an Excel file that includes a weekly total for predicted staff for the duration of the plan.

Note: This topic assumes you have created a new time off plan or have chosen to [edit an existing time off](#) and have opened the time off plan's allotment editor.

1. From the allotment editor, open the **Interaction Optimizer** menu and choose **Import Predicted Staff**. The **Import Predicted Staff** dialog box opens.
2. Click the **Import predicted staff** button and select the previously saved Excel spreadsheet.
3. To determine when allotment will be changed, do one of the following:
 - To leave allotment unchanged when you import predicted staff, select the **Don't update allotment** radio button
 - To base the allotment values on predicted staff, select the **Set allotment from predicted staff** radio button and enter the percent from which to set the allotment.
4. Click **OK** to return to the time off plan's allotment editor.

Change time off plan display options

You can select whether the allotment editor displays default graph measurements in either hours or FTEs.

Note: This topic assumes you have created a new time off plan or have chosen to [edit an existing time off](#) and have opened the time off plan's allotment editor.

1. From the allotment editor, click the [Display Options](#) button. The Time Off Plan Display Options dialog opens.
2. In the **Display Units** area, select one of the following:
 - To display the number of full-time equivalent, select **Show FTEs**
 - To show the number of hours, select **Show hours**
3. Optionally select the **Allow multiple staff types** check box.

Note: This option is disabled if you have not added a representative schedule.

4. Click **OK** to return to the time off plan's allotment editor.

View agent accruals

From the Agent Accruals dialog box, you can view agent accrual information and scheduled or processed time off requests. The Agent Accruals dialog box displays how many hours an agent has accrued or will accrue in the future, scheduled time off requests, and time off hours taken.

Use the Start Date and End Date fields to select the accrual information you want to view. If the selected date range overlaps the current date, the Accrued Balance is calculated on the current date.

Access the Agent Accruals dialog box from the Accrual Plans tab or from a time off plan's allotment editor:

Access the Agent Accruals dialog box from the Accrual Plans tab

1. From the **Interaction Optimizer Home** page, in the **Time Off Planning** area select **Accrual Plans**. The Accrual Plans tab opens.
2. Open the **Interaction Optimizer** menu and select **View Agent Accruals**.

Access the Agent Accruals dialog box from the Time Off Planning area

from the Interaction Optimizer menu in the Time Off Plans tom

1. From the **Interaction Optimizer Home** page, in the **Time Off Planning** area select **Time Off Plans**. The Time Off Plans tab opens.
2. Double-click the desired time off plan. The time off plan's allotment editor opens.
3. Open the **Interaction Optimizer** menu and select **View Agent Accruals**.

About the Agent Accruals column information

Accrued balance: The number of hours an agent has accrued. If the date range is in the past, the value is "<Not applicable>". If the date range includes the current day, the value shows the current accrued balance. If the date range is for the future, the value shows the expected accrued balance on the start date for the date range. This value starts with the current accrued balance, subtracts all approved time off requests before the start date, and adds hours to be accrued before the start date.

Scheduled: The number of hours scheduled in the future. If the date range is in the past, the value is "<Not applicable>". If the date range includes the current day, the value is the sum of all approved time off requests from today to the end date. If the date range is the future, the value is the sum of all approved time requests during that time range.

Unscheduled: The difference between accrued balance and scheduled hours. If the date range is in the past, the value is "<Not applicable>". If the date range includes the current day or is in the future, this value is calculated by subtracting the scheduled from the accrued balance.

To be accrued: The number of hours to be accrued in the future. If the date range is in the past, the value is "<Not applicable>". If the date range includes the current day, the value is the number of hours to be accrued between the current day and the end date. If the date range is in the future, the value is the number of hours to be accrued during the entire date range. This value does not subtract any approved time off requests.

Taken: The number of hours of approved time off requests taken in the past. If the date range selected is completely in the past, the taken value includes all approved requests during that date range. If the date range includes the current day, the taken value includes all approved requests up to yesterday. If the date range is all in the future, the taken value is "<Not applicable>".

Working with time off requests

Use the **Time Off Requests** page to search for existing time off requests, or to add, edit, cancel, approve or deny requests, based on scheduling unit and agent. On this page, you can:

- [Add a time off request](#)
- [Approve or deny a time off request](#)
- [Cancel a time off request](#)
- [Edit a time off request](#)
- [Filter and search for time off requests](#)
- [View pending time off requests](#)
- [Select from a range of requests to view](#)

Add a time off request

You can add a time off request in the Time Off Requests page.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Requests** link. The **Time Off Requests** tab opens.
2. To add a time off request:
 - a. Click the **Add** button. The **Time Off Request** dialog box opens.
 - b. Click the arrow at the end of the **Agent** drop-down list and select the checkbox for the agent or agents for whom the time off request applies.

Note: You can select multiple agents for this request.

- c. Click the arrow at the end of the **Activity code** drop-down list and select the appropriate activity code for the time off request.
- d. In the **Type** area, select **Full day** or **Partial day**.
- e. In the **State** area, select **Pending**, **Approved**, or **Denied**.
- f. In the **Start** field, click the calendar and select the start date of the new or existing time off request. If this is a partial day request, the default start time is the shift start time.
- g. In the **End** field, click the calendar icon and select the end date of the new or existing time off request.
- h. In the **Length** field, use the up and down arrow keys to set the length in hours of the time off request per day. The default value is 8 hours (08:00). Acceptable values are 15 minutes (00:15) through 23 hours and 59 minutes (23:59).
- i. If this time is considered paid time, select the **Use Paid Time** check box.
- j. In the **Notes** field, optionally enter a description of or notes about the time off request.
- k. Click **OK**.

Note: The Submitted by field displays the person who enters the request in Interaction Optimizer or in Interaction Client. New time off requests are noted as Not reviewed until a person with the appropriate credentials approves or denies the time off request. The system checks current time off requests in the database and if overlapping or duplicate requests are found, a caution message is generated.

For more information about time off requests, see the **Related Topics**.

Approve or deny a time off request

You can approve or deny a time off request from the Time Off Requests tab.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Requests** link. The **Time Off Requests** tab opens.
2. To approve a time off request, select the request you want to approve and click the [Approve](#) button.
3. To deny a time off request, select the request you want to deny and click the [Deny](#) button.

For more information about time off requests, see the **Related Topics**.

Cancel a time off request

You can cancel approved or pending time off requests in the Time Off Requests page.

Note: You cannot cancel denied time off requests.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Requests** link. The **Time Off Requests** tab opens.
2. Click the **Cancel time off request** button. The time off request's status changes to Canceled.

For more information about time off requests, see the **Related Topics**.

Edit a time off request

You can make changes to a time off request in the Time Off Requests page.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the Time Off Requests link. The Time Off Requests tab opens.
2. To make changes to the time off request:
 - Select the time off request to edit and click the [Open Selected Time Off Request](#) button. The [Time Off Request](#) dialog box opens.
 - Make the changes in the appropriate fields:

Field or Box	Description
Activity code	Select the appropriate activity code to apply to the time off request.
Type	Select Full day or Partial day
State	Select Pending, Approved, Denied or Canceled .
Start	Click the calendar and select the start date of the time off request. If this is a partial day request, the default start time is the shift start time.
End	Click the calendar icon and select the end date of the time off request.
Length	Use the up and down arrow keys to set the length in hours of the time off request per day. The default value is 8 hours (08:00). Acceptable values are 15 minutes (00:15) through 23 hours and 59 minutes (23:59).
Use Paid Time	If this time is considered paid time, select the check box.
Notes	Optionally enter a description of or notes about the time off request.

3. Click OK.

For more information about time off requests, and details about each status, see the [Related Topics](#).

Filter and sort time off requests

You can filter and sort to search and manage time off requests.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Requests** link. The **Time Off Requests** tab opens.
2. To show or hide columns, right-click any of the columns in the view and from the menu that appears select or deselect the columns you want to show or hide.
3. To filter the time off requests, do one of the following in the column heading to filter:
 - a. Click the icon in the left side of the column heading.
 - b. From the drop-down list that appears, select an option and then click inside the column heading box.
 - c. Type the value to use to filter the view, or where applicable use the icons on the right side of the column heading to select available values. The view is filtered based on your selection. You can filter by more than one column heading at a time.
 - d. To clear a filter, click the "x" in the right side of the column heading for each filter you want to clear.
4. To sort time off requests, click anywhere in the header that contains the criteria by which you want to sort (Agent, Type, Start Date, End Date, Status, Hours Per Day, etc.).
5. To add additional columns of information, right-click in the header area and select the criteria you want to add.
6. To save changes you make in the **Time Off Requests** tab, click the [Save](#) button.

For more information about time off requests, see the **Related Topics**.

View pending time off requests

You can quickly view all the time off requests that have not been processed. This feature allows an administrator to review all pending requests and decide whether to approve or deny them.

1. In the top right corner of the **Time Off Requests** tab, click the **Pending** button. The **Pending** button changes to **Show Previous Filter**, and the **Time Off Requests** tab displays only pending requests.
2. To show the previous date selection and filter settings, click **Show Previous Filter**.

For more information about time off requests, see the **Related Topics**.

Select a range of time off requests to view

You can filter the selection of time off requests you want to view.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Requests** link. The **Time Off Requests** tab opens.
2. Click the [date range](#) button above the time off grid.
3. From the menu that appears, do one of the following:
 - To view time off requests after a specific date, select **Future** and click the calendar button to select the date.
 - To view time off requests within a specific date range, click **Date Range** and use the calendar buttons to narrow the viewing selection.
 - To view time off requests on a specific date, click **Day** and use the calendar button to select the date.
 - To view time off requests within a specific week, click **Week** and use the calendar button to choose the week to view.
 - To view time off requests within a single month, click **Month** and use the arrow buttons to narrow the selection to the desired month and year.
 - To view all time off requests in a single year, click **Year** and use the drop-down list (or arrow buttons) to select the desired year.

For more information about time off requests, see the **Related Topics**.

Synchronize time off requests and time off activities

In the Differences Between Time Off Activities and Time Off Requests dialog box, in the Automatic Fix column Optimizer presents a default fix for each difference. This fix is applied automatically when you select Apply Checked.

Note: The request value is always used, since changes to requests should be done in the time off requests view and then applied to the scheduled time off activities.

To review the differences between time off activities and time off requests:

1. From the Optimizer Home page, open a selected schedule.
2. Open the Interaction Optimizer menu and select **Show Differences in Time Off Requests**. The Differences Between Time Off Activities and Time Off Requests dialog box opens.

Note: The scheduled time off activities shown in this dialog box either differ from the associated time off requests, or do not have a backing time off request.

3. To apply the automatic fix to all differences, make sure all boxes in the Checked column are selected and click **Apply Checked**.
4. To apply the automatic fix to only certain differences, clear the check boxes for the differences you do not want to fix and then click **Apply Checked**.
5. To analyze a scheduled time off activity in the schedule, click the **View selected activity in schedule** link.
6. To manage a scheduled time off request, click the **View selected request in time off view** link.
7. To refresh the dialog box, click **Reload differences**.

Export a list of time off requests

You can export the data in the Time Off Requests tab to an Excel spreadsheet.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Time Off Requests** link. The **Time Off Requests** tab opens.
2. Select a range of time off requests by clicking the [date range](#) button above the time off grid and using the calendar button as needed to select a date or date range. For more information, see [Select a range of time off requests to view](#).
3. Use the column headings and sorting controls to filter and sort the time off requests. For more information, see [Filter and sort time off requests](#).
4. Right-click any column heading and add or remove columns of information by selecting the data you want.
5. To export the data displayed in the Time Off Requests tab, do one of the following:
 - Click the [Export](#) button.
 - From the **Interaction Optimizer** menu, select **Export to Excel** or press **Ctrl+X**.
 - Right-click anywhere in the displayed list of time off requests and select **Export list of time off requests**.
7. In the **Save As** dialog box, select a file location and supply a name for the spreadsheet.
8. Click **Save**. The spreadsheet opens in Microsoft Excel.

For more information about time off requests, see the [Related Topics](#).

Miscellaneous Commands and Quick Keys

There are a variety of commands and quick keys that can be used in Interaction Optimizer. This section includes:

- [Save](#)
- [Publish](#)
- [Zoom In](#)
- [Zoom Out](#)
- [Quick Keys](#)

Miscellaneous Commands

Miscellaneous commands include Save, Publish, and Zoom In and Zoom Out.

Save

Save allows you to save changes to the current schedule. The **Save** button is only enabled when the schedule has one or more changes which have been made since the last time the schedule was saved or published. The **Save** button is not enabled for the current week's published schedule, since any changes that are saved are immediately published. If a change is required for the current week's schedule, make the change and then publish the schedule (which automatically saves the changes before publishing). Also, the **Save** button is not enabled for read-only schedules.

Note: A schedule from the prior week or before that, is set to read-only. The current week's schedule can be either read-only or read/write, depending on what you select when the schedule loads.

Publish

When you publish a schedule, it is first saved to the database, and then notification is made to the Optimizer server. If the schedule is for the current week, then those changes take effect immediately. If the schedule is for a future week, then the schedule becomes the published schedule. Any other schedules from the same forecast and schedule entry are set as not published.

Zoom In

Zoom In allows you to see the current schedule in more detail. There are 3 zoom levels for the day and multi-day views, and 3 zoom levels for the week view. If you zoom in to the most detailed week view, then the next time you zoom in, the schedule switches to the lesser detailed day and multi-day view.

Zoom Out

Zoom Out allows you to see a larger time period for the current schedule. There are 3 zoom levels for the day and multi-day views, and 3 zoom levels for the week view. If you zoom out to the lesser detailed day and multi-day view, then the next time you zoom out, the schedule switches to the most detailed week view.

Quick Keys

The following key or keys can be used to perform certain actions when viewing or editing a schedule in the day or multi-day views:

- **Keys A to Z:** Jump to the first agent with a display name starting with that letter. *Also available in week view.*
- **Alt+right arrow:** Move the selected activities to the right by 15 minutes.
- **Alt+left arrow:** Move the selected activities to the left by 15 minutes.
- **Ctrl+C:** Copy selected activities.
- **Ctrl+V:** Paste the activities captured in a copy **Ctrl+C** or cut **Ctrl+X** command.
- **Ctrl+D or Delete:** Delete selected activities. *Also available in week view to delete shifts.*
- **Ctrl+X:** Cut selected activities.
- **F5:** Reload the **Actual Work** and **RTA Exceptions** data from the database, and refresh the scheduled data from the cache. *Also available in week view.*
- **Ctrl+N:** Create new forecast/schedule/schedule bid
- **Enter:** Open selected bid
- **Ctrl+R:** Rename selected
- **Ctrl+A:** Activate selected schedule
- **Ctrl+P:** Publish selected schedule
- **Enter:** In most grids, press **Enter** on your keyboard to open the selected item's configuration page. For example, shift rotations, schedules, forecasts, time off requests, accrual plans)
- **Double-click:** In most grids, double-click an item to open the selected item or action dialog box.

Optimizer server parameters

Default frequency of staffing group updates

Server parameter: OptimizerStaffingGroupUpdateFrequencyInMinutes

Description: The Optimizer extension in Session Manager listens for changes to the workgroups, interaction types, and skill sets of agents. If any changes are made, then it waits for 30 seconds and re-builds the staffing groups. At the same time, it sends updates back to all the ICBM users that are listening for updates.

The OptimizerStaffingGroupUpdateFrequencyInMinutes server parameter controls the number of minutes to wait between updating the Optimizer staffing groups. The default is 15 minutes, but the value can be set to anywhere between 1 to 1440 minutes.

Maximum agents per scheduling unit

Server parameter: OptimizerIgnoreMaxAgentsPerSchedulingUnit

Description: If there are more than 500 agents in one scheduling unit, we add warnings in ICBM. If this server parameter is set to "true", then we won't show any of these warnings. Note that it's fine to have many more than 500 agents for one customer as long as they are in different scheduling units.

Miscellaneous topics

Accrual Rates for Selected Agents area

In the Accrual Rates for Selected Agents area, agents you add to the plan appear in the grid, along with information about the agent. Only agents with reference dates are eligible for an accrual plan.

Note: This topic assumes you have [created a new accrual plan](#) or have chosen to [edit an existing accrual plan](#) and have opened the accrual plan's configuration page.

The Accrual Rates for Selected Agents area contains the following columns:

Agent

The agent added to the plan.

Reference Date

The date used to in calculating increases in an agent's accrual balances. This value is typically the same as the "Start Date", but if the agent negotiated a different rate for vacation or another activity, you can use the accrual reference date to reflect the date. For example, let's assume agents normally receive 2 weeks vacation per year for the first 3 years, and 3 weeks vacation per year after the third year. One agent, however, negotiated for 3 weeks vacation per year beginning at the hire date. This agent's start date can be 1/1/2014, but a the accrual reference date would be 1/1/2011 to accrue the higher rate immediately.

Accrued Balance

This accrued balance is the current value of how many accrued hours each agent has. It will get updated automatically each accrual period at midnight in the scheduling unit's time zone. For example, if the accrual rate is set to 6 hours per month, then once a month the accrual balance will be increased by 6 hours. Note that the admin can edit the current value any time in case the agent has some special case that makes him/her get or lose some accrual balance.

Rate

The number of hours the agent accrues according to the accrual plan rate.

Period

The time period in which the agent accrues the hours as set in the accrual plan rate.

Override Rate

[Optional] Manually add a new accrual rate . This rate takes precedence over the accrual rates for different time periods configured in the accrual plan.

Override Period

[Optional] Manually add the amount of time (for example, Daily, Weekly, Biweekly, Semimonthly, Monthly, Yearly) for which to apply the override rate. This period takes precedence over the accrual period configured in the accrual plan.

Accrued Cap Override

[Optional] Manually enter a new amount of hours allowed under the plan for this agent. This number, in hours, takes precedence over the number of hours set in the Accrued Hours Capping area. If you do not configure the Accrued Hours Capping area, the

Accrued Cap Override field is disabled.

Note: The Override Rate, Override Period, and Accrued Cap Override fields are optional. Configure these settings for special accrual cases. For example, if an agent negotiates additional vacation above the amount specified in the company's general policy, use these rates to configure the exception.

Add Days dialog

Use the **Add Days** dialog box to search for days to add to the forecast.

To search for days to add to the forecast:

1. Open the **Source Data** dialog box and click the tab of the day for which you want to search.
2. Click **Add**. The **Add Days** dialog box opens.
3. Make your selections in the **Add Days** dialog box. You can:
 - Add or change the day(s) of the week
 - Select day classifications
 - Choose from a date range, number of weeks, or number of occurrences
4. Click **Add** to begin the search.

Add Modification dialog

The **Add Modification** dialog box allows users to quickly and easily change the data in the volume forecast for any set of specific days, workgroups, interaction types, skillsets, and times. The user is provided with immediate feedback on how the data will be changed.

Note: When you open the **Add Modification** dialog box, the values for the filters (Day, Workgroup, Interaction Type, Skillset, Times, and Metric) are set from the values in the forecast editor. In other words, the data you modify in the Add Modification dialog box is the same data you just viewed in the Forecast editor.

Add or Edit Shift Activities

You can add or edit shift activities for a daily constraint.

Note: Before you configure shifts, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

From the **Interaction Optimizer Home** page, in the Configuration area click **Shifts**. The **Shifts** tab opens.

Click the **Activities** tab, click **Add**. The **Add New Activity** dialog box appears.

Add New Activity [X]

Activity type: Break

Length: 00:15

Attendance requirement type: Required

Time

Actual or relative time: Relative to shift start

Earliest start time from shift start: 08:00

Latest start time from shift start: 09:00

Possible times increment: 00:30

Counts toward paid time

Counts toward contiguous work time

Description:

OK Cancel Help

Enter the following information:

Activity type	The type of shift activity.
Length	The length of time the activity lasts.
Attendance requirement type	<p>Valid values are:</p> <ul style="list-style-type: none"> • Unspecified (default setting): Selecting this option discards schedules that have shift activities that have been skipped (for example, all remaining activities to be scheduled do not have a start time greater than or equal to the current time), suppresses schedules that end in shift activities that are both non-paid and non-contiguous, and suppresses schedules that have unscheduled shift activities that are both paid and contiguous. • Do Not Schedule: Selecting this option causes the scheduling engine to ignore this shift activity. • Optional: Selecting this option causes the scheduling engine to keep schedules meeting minimum constraints and having optional, unscheduled shift activities. • Required: Selecting this option causes the scheduling engine to discard potential schedules that do not contain the scheduled shift activity. <p>Note: If required activities occur during a paid time off request, the required activities are ignored and a schedule containing the time off request is created.</p>
Actual or relative time	<p>Valid values are:</p> <ul style="list-style-type: none"> • Relative to shift start (default setting): Select this option to use times relative to start times. For example, if this activity is assigned to different shifts, the relative time should be used (i.e., 2:00 hours from shift start) rather than absolute time (i.e., 10:00 AM), so that the settings are valid for all the shifts. • Actual time: Select this option to use absolute start times.
Earliest start time from shift start	Type in the box or use the up and down arrows to set the earliest time this activity can start. The default value for this field is 8:00 AM. If Relative to shift start is selected in the Actual or relative time list box, this time is the earliest start time, relative to the shift start time, the activity can start. If you selected Actual time from the Actual or relative time list box, this time is the absolute earliest start time the activity can start.
Latest start time from shift start	Type in the box or use the up and down arrows to set the latest time this activity can start. If Relative to shift start is selected in the Actual or relative time list box, this time is the latest start time, relative to the shift start time, the activity can start. If you selected Actual time from the Actual or relative time list box, this time is the absolute latest start time the activity can start.
Possible times increment	The possible amount of time to increment the start time.
Counts toward paid time	Select this check box if the activity counts toward paid time.
Counts toward contiguous work time	Select this check box if the activity counts towards contiguous work time.
Description	A description of the activity.

To edit an activity:

1. From the **Activities** tab, click the activity to edit.
2. Click [Edit](#). The Edit Activity dialog appears.
3. Change the information as needed.

Add or remove view columns

You can add or remove columns from the view. Right-click a column label in the view to display a menu of the columns that can be added or removed.

Add or remove a column

1. Right-click the column heading. A drop-down list of available column names appears.
2. Do one of the following:
 - To add a column, click the name of a column.
 - To remove a column, click the name of a column with a check mark.

Additional Information on Reforecast Interactions

*If you check the **Automatically reforecast before refresh** check box in the **General** tab, then all the data shown from intervals before the current time are reforecast values that were calculated just prior to that interval.*

For example, at 8:02 the actual data from the 7:30 to 8:00 interval is available and will be used to calculate the reforecast for the interval from 8:00 to 8:30 and all the intervals from 8:30 to the end of the day. At 8:32, the actual data from 8:00 to 8:30 will be available and will be used to calculate the reforecast from 8:30 to 9:00 and all the intervals for the rest of the day. It will overwrite the 8:30 to 9:00 reforecast calculated at 8:02 with the newly reforecast value calculated at 8:32 since it should be more accurate now with more information. This continues throughout the day so that the 8:00 to 8:30 reforecast was calculated at 8:02 using the sliding window data available at that time, the 8:30 to 9:00 interval was reforecast at 8:32, the 9:00 to 9:30 interval was reforecast at 9:02 and so forth. Note that I'm using the default values to reforecast every 30 minutes starting with the 2 minutes offset after the hour.

*If you uncheck the **Automatically reforecast before refresh** check box, then all the reforecast data is handled manually. Whenever a user manually does a reforecast, the data for the rest of the day is calculated and it overwrites any existing reforecast data from the current interval to the end of the day.*

Change Agent Group Display Options

You can change the way agent groups are displayed.

To change the display options:

1. Click the [Display Options](#) button on the toolbar to display the dialog box.
2. Select any of the following options to skip the delete confirmation (first four options) or the duplicate rankings message:
 - Do not ask before deleting agent group
 - Do not ask before deleting criterion
 - Do not ask before saving changes when switching to another agent group
 - Do not ask before changing an agent to a new agent group
 - Do not show duplicate agent rankings message

Or...

 - De-select (uncheck) any of the above options to display the messages.
3. Click OK to save your changes.

Agent Groups tab

You can view agents in the agent groups and the associated information on the Agents tab, and optionally filter the view. You can also change the agent's or agents' group membership, and you can add agent groups and set the criteria and data types to consider when ranking.

The screenshot shows the 'Agent Groups' configuration window. At the top, there is a breadcrumb trail: Home > Scheduling unit 3 > Configuration > Agent Groups. Below this is a toolbar with 'Add', 'Delete', 'Copy', and 'Paste' icons, and a 'Group Rank' dropdown menu. The main area contains a table with the following data:

Agent Group	Agent Count	Agent Group Rank	Agents Missing Data	Staffing Group Count	Last Agent Ranking Time
Agent Group 1	6	1	6	3	9/12/2019 6:05 AM
Agent Group 2	4	2	4	2	9/12/2019 6:05 AM

Below the table, there are tabs for 'Agent Group', 'Agents', 'Agent Rankings', and 'Agent Data'. The 'Agent Group' tab is active, showing a form for 'Agent Group 1' with a 'Group rank' of 1. Underneath, there is a 'Criteria definitions' section with a table:

Criterion	Data Type	Ascending	Percentage
Tie	Random	<input checked="" type="checkbox"/>	20
Hire Date	Date	<input checked="" type="checkbox"/>	30
Adherence	Numeric	<input checked="" type="checkbox"/>	50

At the bottom of the criteria table, there are 'Add' and 'Delete' buttons, and a 'Total percentage: 100' label. Below the criteria table, there are two checkboxes: 'Enable schedule bidding' (unchecked) and 'Enable activity bidding' (checked).

Allotment Cap List dialog box

In the Allotment Cap List dialog box, you can view and edit capped days per staff type and coverage group.

1. From the allotment editor, open the **Interaction Optimizer** menu and choose **View Capped Days**. The Allotment Cap List dialog box opens.
2. Click the fields in the **Allotment** and **Allotment Cap** columns to edit them.

Note: If you attempt to set an allotment higher than the allotment cap, the value will be set equal to the allotment cap.

3. Select the check box the "Blackout Day" column to make that day a blackout day.

Note: Because no plan allows time off on a blackout day, the system automatically denies requests made on blackout days.

4. To save your changes, click **OK**.

Activate Schedule Bid button

Icon	
Location	Schedule Bid
Description	Activates the currently selected schedule bid for effective dates.

Add Activity button

Icon	
Location	Schedules
Description	After selecting an activity from the drop-down list, use this button to drag the activity to the current schedule.

Add button

Icon	 and  Add
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms.
Description	Opens a new form in which to create or add data.

Approve proposed shift trade button

Icon	
Location	Shift Trading Requests
Description	After selecting a proposed shift trade request to approve, click this button to approve the request.

Approve a Time Off Request button

Icon	
Location	Time Off Requests
Description	After selecting a time off request to approve, click this button to approve the request.

Browse button

Icon	
Location	Various dialog boxes, tabs, and forms.
Description	Search for files to import.

Change Dates button

Icon	
Location	Schedule Bidding
Description	Change schedule bidding times

Copy to another scheduling unit button

Icon	
Location	Accrual Plans tab
Description	Copies an accrual plan to another scheduling unit.

Copy button

Icon	 Copy or 
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms.
Description	Copies the selection to the clipboard.

Date Range button

Icon	
Location	Time Off Requests tab
Description	Select the range of time off requests you want to view. Options are Future, Date Range, Day, Week, Month, Year.

Day View button

Icon	
Location	Interaction Optimizer toolbar.
Description	Displays the current schedule in day mode. This format shows up to 25 hours in the schedule, with the start time as one hour before the earliest activity and the end time as 25 hours after the start time. Day mode allows editing of activities as long as the schedule is for a future time period, or is the live (published) schedule

Excuse Exceptions using Default Values button

Icon	
Location	Adherence Exceptions tab
Description	Excuse one or more exceptions using values set in the Adherence Exceptions area of the Scheduling Unit tab.

Delete button

Icon	 and  Delete
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms
Description	Removes data from a form, such as an agent, schedule, activity, forecast, and more

Deny entire shift trade request button

Icon	
Location	Shift Trading Requests
Description	After selecting an entire proposed shift trade request to deny, click this button to deny the request.

Deny pending shift trade match button

Icon	
Location	Shift Trading Requests
Description	After selecting a pending shift trade request to deny, click this button to deny the request.

Deny Time Off Request button

Icon	
Location	Time Off Requests page
Description	Select the time off request you want to deny and click this button to deny it

Dimensions button

Icon	
Location	Interaction Optimizer graph options
Description	Sets 2D or 3D dimensions in a graph

Display Options button

Icon	
Location	Interaction Optimizer toolbars
Description	Opens the Display Options dialog box, where you can configure various options to view

Edit button

Icon	 or  Edit
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms
Description	Use this button to modify information in a form or dialog box

Export to Excel button

Icon	
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms
Description	Exports information into an Excel spreadsheet

Export button

Icon	
Location	Time Off Requests
Description	Exports data in the Time Off Requests tab to an Excel spreadsheet.

Filter and Sort button

Icon	
Location	Schedules
Description	Filter and sort workgroup, interaction type, skill set, and shifts

Open Selected button

Icon	
Location	Various Interaction Optimizer columns and pages
Description	Opens a drop-down list from which you can select filtering options

Graph Type button

Icon	
Location	Intraday Monitoring
Description	Select a bar or line graph

Graph button

Icon	
Location	Schedules
Description	Display a graph

Import Source Data button

Icon	
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms
Description	Imports information from an Excel spreadsheet or external document

Manage Day Classifications button

Icon	
Location	Interaction Optimizer toolbar
Description	Add, edit, remove, or rename Day Classifications and descriptions, and determine whether to include or exclude them from forecasts

Add button

Icon	
Location	Service Goal Groups
Description	Opens the Move Service Goal Groups, where you can move a workgroup to another service goal group

Multi Day View button

Icon	
Location	Interaction Optimizer toolbar
Description	Displays the current schedule in a multi-day mode. This feature displays daily schedules in hourly time slots, up to one week. Using the Start Time and End Time selection boxes, you can pick the start and end times to the nearest hour. Click Update to update the schedule contents after changing start and end times. Multi-day mode allows editing of activities, as long as the schedule is for a future time period, or is the live (published) schedule.

Open Selected button

Icon	
Location	Interaction Optimizer toolbar, time off requests page
Description	Opens the selected schedule or time off request

Paste button

Icon	 Paste
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms
Description	Pastes the selection from the clipboard

Print button

Icon	
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms
Description	Presents print, quick print, and print preview options for specific forms and data

Process Bids button

Icon	
Location	Schedule bidding.
Description	Process the currently selected bid.

Publish Selected Schedule button

Icon	
Location	Interaction Optimizer toolbar
Description	Publishes the current schedule

Reforecast button

Icon	
Location	Interaday Monitoring
Description	Opens the Reforecast Settings dialog box and allows you to restore defaults, configure settings, and set reforecasting to run on request

Refresh Screen button

Icon	
Location	Interaction Optimizer toolbar
Description	Updates the screen with the most recent data

Rename Selected Schedule button

Icon	
Location	Interaction Optimizer toolbar and scheduling
Description	Rename the currently selected schedule

Save button

Icon	
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms
Description	Saves the information in the form or dialog box

Excuse Single Exceptions button

Icon	
Location	Adherence Exceptions tab
Description	Excuse a single exception and open the Excuse Exception dialog to specify excused values.

Source Data button

Icon	
Location	Forecasting
Description	Configure data for the Forecast Editor

Source Data button

Icon	
Location	Time Off Requests tab
Description	Display time off requests for a date range, specific day, week, month, or year. Or specify a range of dates.

Validate button

Icon	
Location	Interaction Optimizer toolbar and various dialog boxes, tabs, and forms
Description	Validates a schedule or shift

View Report button

Icon	
Location	Interaction Optimizer Shift Rotations tab
Description	Opens the current shift rotation report for viewing and analysis

Week View button

Icon	
Location	Interaction Optimizer toolbar
Description	Displays the current schedule in a weekly format. This mode displays daily schedules in 24 hour (or shift) time slots, up to one week. Week mode allows you to edit shifts (double-click to edit activities), as long as the schedule is for a future time period or is the live (published) schedule.

Choose which time off requests to view

In the top left area of the **Time Off Requests** tab, you can select filter criteria to display only the time off requests that match certain requirements. You can select future time off requests or time off requests for a specific date range, day, week, month or year. You can also select from approved, denied, and pending requests.

Choose which time off requests to display

1. From the [Interaction Optimizer Home page](#), click the **Time Off Requests** link. The **Time Off Requests** tab opens.
2. In the area above the column headings, click the [time off requests selection](#) button.
3. From the menu that appears, select which time off requests to view:

Requests Type	Action
Future	The Show requests after box appears. Click the calendar icon and use the arrows to select the date after which you want to display time off requests
Date Range	The Date Range boxes appear. Click the calendar icons and use the arrows to specify the start and end dates for which to display time off requests.
Day	The Day box appears. Click the calendar icons or use the arrows to navigate to the date for which to view time off requests.
Week	The Week of box appears. Click the calendar icons or use the arrows to navigate to the date for which to view time off requests.
Month	The month and year drop-down fields appear. Select the month and year for which to display time off requests.
Year	The year drop-down field appears. Select the year for which to display time off requests.

3. Note: In the upper right corner of the **Time Off Requests** tab, Interaction Optimizer returns the number of pending, approved, and denied time off requests. To view pending requests, click the Pending To select the type of time off requests to view,

Command Buttons

The following buttons can be used to perform certain actions:

	Add
	Delete
	Display Options
	Edit
	Export to Excel
	Manage Day Classifications
	Open Selected Schedule
	Print
	Publish Selected Schedule
	Rename Selected Schedule
	Save
	Graph Type
	Dimensions
	Browse
	Reforecast

Create a new time off plan

Time off plans allow administrators to manage the allotments of time off per staff type, automating the process of approving, waitlisting, or denying time off requests.

1. From the [Interaction Optimizer Home page](#), in the **Time Off** planning area select the **Time Off Plans** link. The **Time Off Plans** tab opens.
2. Click the add button. The **Create New Time Off Plan** dialog box opens.
3. Add a descriptive name, select the time off plan's start and end dates, and optionally add a detailed description in the appropriate fields and click the **Next** button.
4. In the **Select a schedule to represent a normal week** area, click the schedule on which to base the time off plan. This option distributes the allotment across multiple coverage groups when an overall number is set for all the coverage groups. This option is also used if you import predicted staff at the weekly level, but the allotments are handled at a daily level.
5. In the **Distribution from selected schedule (in hours)** area, optionally modify the values for the staff type or coverage group on any days of the week. The exact numbers do not matter, but they are used in comparison to the values for other coverage groups.
6. Click the **Next** button.
7. To set up a predicted staff file to import, do the following:
 - Click the **Download predicted staff template** file button and save the template to the desired location.
 - Modify the new file without changing the pre-defined format settings and save it for future use. You can now use this file to import predicted staff.
8. To specify predicted staff, do one of the following:
 - Click **Import predicted staff** button.
 - Select the pre-configured Excel spreadsheet and click the **Open** button.
9. After you import the predicted staff file, do one of the following:
 - To import predicted staff but leave the allotment values the same, select the **Don't update allotment** radio button.
 - To base allotment values on the imported predicted staff, select the **Set allotment from predicted staff** radio button and in the **Percent** box enter the percentage of allotment from the predicted staff.
10. Click the **Finish** button. The time off plan's allotment editor opens.

For more information on time off planning and the allotment editor, see the Related Topics.

Create New Accrual Plan dialog box

Create an accrual plan to define the rate at which groups of agents receive more time off in specified activity codes, define permissions and restrictions, and set up approval options.

Note: Accrual plans use reference dates to calculate which rate at which the agent accrues hours. Only agents with reference dates are eligible for an accrual plan. You can either copy the hire date to the reference date, or you can manually enter it when you select eligible agents.

1. From the [Interaction Optimizer Home page](#), in the Time Off Planning area click the **Accrual Plans** link. The **Accrual Plans** tab opens.
2. Click the **add** button. The **Create New Accrual Plan** dialog box opens.
3. Enter a descriptive name for the accrual plan and click the **OK** button. The accrual plan's configuration page opens.
4. [Configure the new accrual plan.](#)

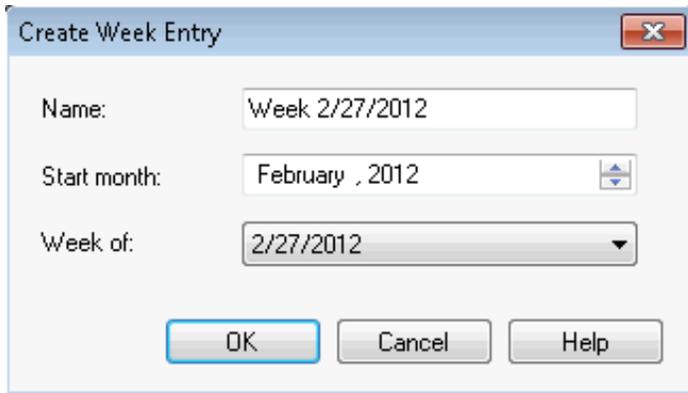
Create Week Entry

You can create a new week entry for a scheduling unit.

Note: Before you configure shifts, select the appropriate scheduling unit from the [Interaction Optimizer Home page](#) Scheduling unit drop-down list.

To create a week entry:

1. From the **Interaction Optimizer Home** page, in the Scheduling area click **Create Schedule**. The **Create New Schedule** tab opens.
2. From the Interaction Optimizer toolbar, click **Week entry**. The **Create Week Entry** dialog box appears.



The screenshot shows a dialog box titled "Create Week Entry". It has a close button (X) in the top right corner. The dialog contains three input fields: "Name:" with the text "Week 2/27/2012", "Start month:" with a dropdown menu showing "February , 2012", and "Week of:" with a dropdown menu showing "2/27/2012". At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

3. Type a **Name** for the week entry.
4. Select the **Start month** using the up and down arrows. The default is the current month.
5. Select the **Week of** from the drop-down menu. The default week is the nearest week that does not already have an entry.
6. Click **OK** to save the week entry, which is now available for weekly schedules to be added.

Criterion definitions

Criterion definitions determine how individual agents are ranked or ordered. This ranking allows supervisors to take into account various criteria to allow higher ranked agents to select better schedules in schedule bidding, or have their preferences used more often. The criteria includes up to ten fields. Each field can be any of the three types: numeric, date, or random.

These fields may contain criterion values such as agent skill strength (e.g., hire date or promotion date) which affect the ranking of agents within the agent group. These fields are then used to determine an agent's rank for each given criteria, using either ascending or descending ordering (as specified). The individual criterion ranking should then be weighted (e.g., hire date = 30%; random rank = 20%), and an overall rank is calculated. The total percentage for all the criteria should be 100%. This overall ranking determines the precedence of the agents' preferences in case of a tie between two agents with the same preferences for a given interval. It also determines the order in which schedule bids are processed so the agent with the highest overall rank receives his or her first schedule choice.

It is not advantageous to have more than one random value since you could easily add all the percentages of the individual random values and put them into one field. For example, RandomValue1 = 10%, RandomValue2= 15%, and RandomValue3 = 15% is same as having one random value = 40%.

Randomization can be used also as a tie breaker if all other criteria is the same (e.g. same skill level or same hire date). The weight of Random Rank in relation to the other criteria, determines how important randomization is. If the random field is not used, it is not considered in relation to preferences. You may also use Random Rank as the only criteria for ranking.

Deferred work

Deferred work includes all interactions with a service level goal that is larger than the statistics interval (15 or 30 minutes depending on your configuration), and is primarily associated with email, where typical response time goals are a day or more.

Interaction Optimizer assumes agents use the time not occupied with other work to handle deferred work, up to a maximum occupancy you specify per scheduling unit. For instance, if an agent is expected to be occupied with calls for 70% of their time and you configure the maximum occupancy to be 90%, Interaction Optimizer assumes the agent can spend 20% of their time on deferred work.

Delete a Schedule Bid

You can delete an obsolete schedule bid.

To delete a schedule bid:

1. From the [Interaction Optimizer Home page](#), in the Scheduling area click **Schedule Bids**.
2. Do one of the following:
 - Right-click the schedule bid name and then click **Delete selected schedule bid**.
 - Select the schedule bid name and then, in the Navigation Pane toolbar, click the **Delete** button.
3. In the **Delete Confirmation** dialog box, click **Yes**.

Excuse Exception dialog box

You can review adherence exceptions one by one and mark them excused or unexcused. You can also partially excuse an adherence exception.

Example: If an agent is late returning from a meeting, but you know the meeting took longer than scheduled, you can excuse the extra time spent in the meeting, but count part of the unreasonably long time the agent took to get back to work in the agent's time out of adherence statistics.

In this dialog box:

Minutes to excuse	Use the spin control to select the number of minutes you want to excuse
Activity	Click the down arrow at the end of this field's drop-down list and select the activity toward which to apply the excused minutes.
Notes	Optionally type a reason for the adherence exception.

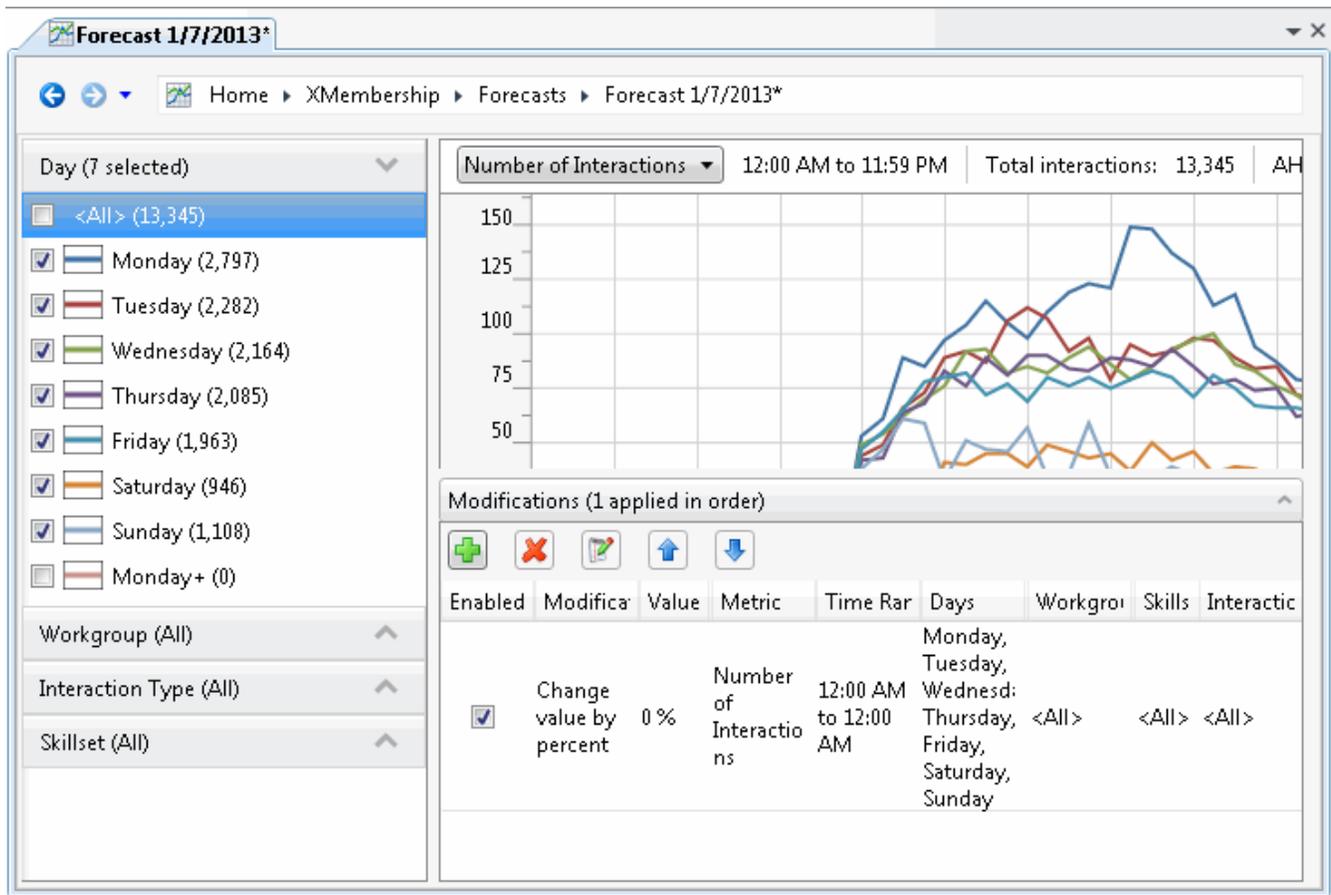
Forecast Display Options dialog box

In the **Forecast Display Options** dialog box, you can choose which values are shown, such as the number of interactions, the average handle time, average after call work, and average talk time. You can choose to show data points on graphs or to show the actual values. You can also select whether to display times in the forecast time zone or the local time zone, and format the time in seconds or minutes.

For more information, see [Configure forecast display options](#).

Forecast Editor dialog

In the Forecast Editor dialog box, you can customize various aspects of the selected forecast.



Administration Navigation Pane

The Administration navigation pane allows authorized users to configure scheduling unit options, agent groups, shifts, and set schedule preferences. in the workspace. You can set agent schedule preference coverage and enable schedule bidding.

This section includes:

- [Configuration](#)
- [Configure Agent Groups](#)
- [View Schedule Preferences](#)
- [Configure Shifts](#)

Interaction Optimizer Module Licensing

The Interaction Optimizer User/Station Licenses are set up in Interaction Administrator's Licenses Allocation container and on Interaction Administrator's User or Station configuration Licensing tab:

1. **Interaction Optimizer Access Real-time Adherence (I3_OPTIMIZER_SHOWRTA):** This user-only license allows RTA information to be generated for each agent. If the agent doesn't have this license, then no RTA exceptions are logged in the database (or appear on RTA reports), and the user's RTA status not will appear in the Real-time Adherence view in IC Business Manager.

Note: Starting with IC 4.0, Interaction Supervisor views are located in IC Business Manager.

2. **Interaction Optimizer Client Access (I3_ACCESS_OPTIMIZER):** This user/station license is required to enable agents to view their schedule within Interaction Desktop.
3. **Interaction Optimizer Real-time Adherence Tracking (I3_ACCESS_OPTIMIZER_RTA):** This user/station license is required for a supervisor to view real time adherence data or actual work in the Interaction Optimizer module in IC Business Manager.
4. **Interaction Optimizer Schedulable (I3_OPTIMIZER_SCHEDULABLE):** This **user-only** license is required if the user is to be scheduled with Optimizer.

For more information on Interaction Optimizer licenses, see the *Interaction Optimizer Technical Reference* in the PureConnect Documentation Library.

Long-term forecast generation page

After you create the long-term forecast, select representative weeks if applicable, and generate the forecast, the Generating long-term forecast page opens. This page displays status messages as the long-term forecast generation progresses, such as loading historic data or generating forecast.

When you see the **Long-term forecast generation is complete** message, review the status messages and click **OK** to open the long-term forecast editor.

Working with Scheduling Units

When you select a scheduling unit, you can configure agent schedule preference versus coverage focus. This setting determines, when scheduling, how strongly agent preferences are taken into account versus best schedule coverage. This is the default configuration setting for agent preferences at the scheduling unit level. When a new agent group is created, this setting is used, unless the same setting is changed at the agent group level.

Note: Agents set their schedule preferences in Interaction Client. For more information, see *Working with Interaction Optimizer* in the Interaction Desktop online help.

The scheduling engine generates all possible schedules as it does normally with the following additional steps:

1. Score each schedule per agent in terms of preferences
2. Rank schedules per each agent in order of meeting agent preferences

If the **Agent Schedule Preference Versus Coverage Focus** setting is "100", then all generated schedules are kept. If the setting is less than "100", then Interaction Optimizer uses that value, treats it as a percentile ranking, and keeps the corresponding amount of schedules. For example, with a value of "75", Interaction Optimizer eliminates the bottom 25% of schedules that were ranked (or ordered) earlier. When the scheduling engine reaches the agents/schedules/coverage evaluation phase to determine the best schedules, it now only considers schedules that meet or exceed a minimum threshold in terms of honoring agent preferences.

If the **Agent Schedule Preference Versus Coverage Focus** setting is "1", then Interaction Optimizer attempts to eliminate all but the top ranked schedule, e.g., 99th percentile. Interaction Optimizer may keep a different 'top' schedule depending on constraints.

Note: Before you configure settings, select the appropriate scheduling unit from the [Interaction Optimizer Home page Scheduling unit](#) drop-down list.

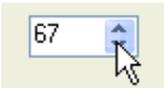
To set the Agent Schedule Preference Versus Coverage Focus setting:

1. From the **Interaction Optimizer Home** page, in the Configuration area click **Scheduling Unit**. The **Scheduling Unit** tab opens.
2. In the **Agent schedule preference versus coverage focus** area, do one of the following:

- Click and drag the pointer on the slider bar to change the setting.



- Use the up or down arrows to adjust the setting.



- A setting of "1" mainly ignores coverage and focuses on agent preference. A setting of "100" mainly ignores agent preference and focuses on coverage. The default setting of "50" focuses equally on agent preference and coverage; a value closer to "100" focuses more on coverage, and a value closer to "1" focuses more on preferences when scheduling agents.
3. Click the **Save** button to save your changes.

New Forecast dialog

In the New Forecast dialog box, you can [create](#) a [local forecast](#) or an [AI-powered forecast](#).

Additional Resources

Because Interaction Optimizer is integrated with Customer Interaction Center, there is additional documentation that includes related material. Documents are available in the PureConnect Documentation Library.

For additional information see:

- [Interaction Optimizer Online Help](#)
- [Interaction Reporter Help](#)
- [Interaction Administrator Help](#)
- [Interaction Desktop Client](#)
- [Interaction Supervisor Help](#)
- [Interaction Optimizer Technical Reference](#)
- [Interaction Optimizer Requirements and Limitations Overview](#)

After Call Work

After call work is the time in seconds that an agent spends completing work or wrap-up activities related to a call.

Agent Information Area

The section of columns to the left of the beginning of each schedule row is the agent information area. Use the vertical slider bar to resize the columns.

Agent	P	Monday, 12/15/2008	
		9:00 AM	10:00 AM
Marie Chen			ACD
Marie Chung			ACD
Marie Francisco			
Marie Herman			ACD
Mickey Bond			
Mike Franco			ACD
Mike Hinkle			
Miles Graham			ACD
Pam Able			
Pam Baldwin			ACD
Paul Brown			
Paul Jackson			ACD
Peter Hawkins			

Add or remove columns by right-clicking on the column header, and select the column to add or remove from the menu.

Agent	Paid Hours for Day	Total Hours for Day	Monday, 12/15/2008	
			9:00 AM	10:00 AM
Marie Chen	✓	Agent		
Marie Chung	✓	Paid Hours for Day		
Marie Francisco		Paid Hours for Week		
Marie Herman	✓	Total Hours for Day		
Mickey Bond		Total Hours for Week		
Mike Franco	8.50	9.50		
Mike Hinkle	7.50	8.50		
Miles Graham	5.00	6.00		
Pam Able	7.50	8.50		
Pam Baldwin	8.50	9.50		
Paul Brown	7.50	8.50		
Paul Jackson	8.50	9.50		
Peter Hawkins	7.50	8.50		
Peter Hinkle	8.50	9.50		
Peter Hogan	7.50	8.50		

The columns available are:

- **Agent** - This is the name for each scheduled agent is displayed. If the display name for the agent is not available, then the user name is displayed.
- **Paid Hours for Day** - This is the number of paid hours for the agent's activities in the current day.
- **Paid Hours for Week** - This is the number of paid hours for the agent's activities in the entire weekly schedule.
- **Total Hours for Day** - This is the total number of hours the agent has activities in the current day. This does not include "Unavailable" or "Unscheduled" activities.
- **Total Hours for Week** - This is the total number of hours the agent has activities in the entire weekly schedule. This does not include "Unavailable" or "Unscheduled" activities.

Sort columns by clicking on the column header. The changes made in the column display are saved, and the changes persist when you close and reopen a schedule.

Apply Time Off Requests

You can apply time off requests in a [local schedule](#). You cannot apply time off requests in an [AI-powered schedule](#).

Time off requests appear as requests that are submitted after schedule generation and which were approved but not yet applied.

Time off requests entered after a schedule is generated and before you begin to edit appear in a dialog box when you load the schedule in Interaction Optimizer. Select the requests to apply to the schedule. The time off requests can also be filtered.

Apply time off requests

1. From the [Interaction Optimizer Home page](#), open the generated schedule. The selected schedule opens in the **Schedule** tab.
2. Open the Interaction Optimizer menu and select **Show Unapplied Time Off Requests**. The **Time Off Requests** dialog box opens.

Note: If unapplied time off requests exist for this schedule, the **Time Off Requests** dialog box appears automatically when you open the schedule.

3. Use the **Filter Settings** area to limit the number of requests in the view. For example, filter agents by name, type of request, length, and dates of requests.
4. Select the check box of the agent with the time off request, click **Apply**, and click **OK**.
5. To select or deselect all requests, select the **Check / Uncheck All** check box and click **OK**.
6. Double-click a request to manually edit it, view schedule activity before and after a time off request is applied, and see time overlaps.

Note: You can manually edit partial time off requests, but you cannot edit full-day requests.

Tip: Manual edits allow an administrator scheduling flexibility. For example, you may want to schedule an important activity together with the time off request applied, or even reduce or extend the time off request, based on a last minute decision.

Average Handle Time

Average Handle Time (AHT) is the sum of the average interaction time and the average after call work (ACW) time. It can be calculated as $\text{Average Interaction Time} + \text{ACW} = \text{AHT}$.

Change Activity Defaults

You can choose the default values for each activity type when that activity is added to the schedule. You can also set **paid** and/or **counted as contiguous work time** behavior, and set the default activity length.

Make changes to activity defaults

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule link**. The selected schedule opens.
2. On the **Interaction Optimizer** toolbar, click [Display Options](#).
3. On the **Activity Colors** tab, select the check box(s) for the activity you want to change.
4. On the **Activity Defaults** tab, select the check box(s) for the activity you want to change.
5. Do one or more of the following:
 - Select the **Counts as paid time** check box to make this a paid activity.
 - Select the **Counts as contiguous work time** check box for the activity is considered work time.
 - Use the up and down arrows to set the default activity length.
6. When all changes are made, click **Update activities...**, then click **OK**.

Tip: To discard changes and return to the original settings, click **Restore Defaults**. To edit all activities at the same time, click **Check All**.

Change General Display Options

You can change the number of weeks of old schedules to show.

Changes general schedule appearance

1. From the [Interaction Optimizer Home page](#), in the Scheduling area select the appropriate schedule from the Schedules drop-down list and click the **Open selected schedule link**. The selected schedule opens.
2. On the **Interaction Optimizer** toolbar, click [Display Options](#).
3. Click the **General** tab.
4. Use the up and down arrow keys or type a number to change the number of past schedule weeks to show in the workspace. The default value is 4 weeks.

Paste Group Activity

The Paste Group Activity dialog appears after you select an activity in the schedule, copy the activity to the clipboard, and then paste the activity back into the schedule. You can set the following information for the copied group activity:

Start time: The time the activity starts.

Activity type: The type of activity.

Length: The length of time the activity lasts.

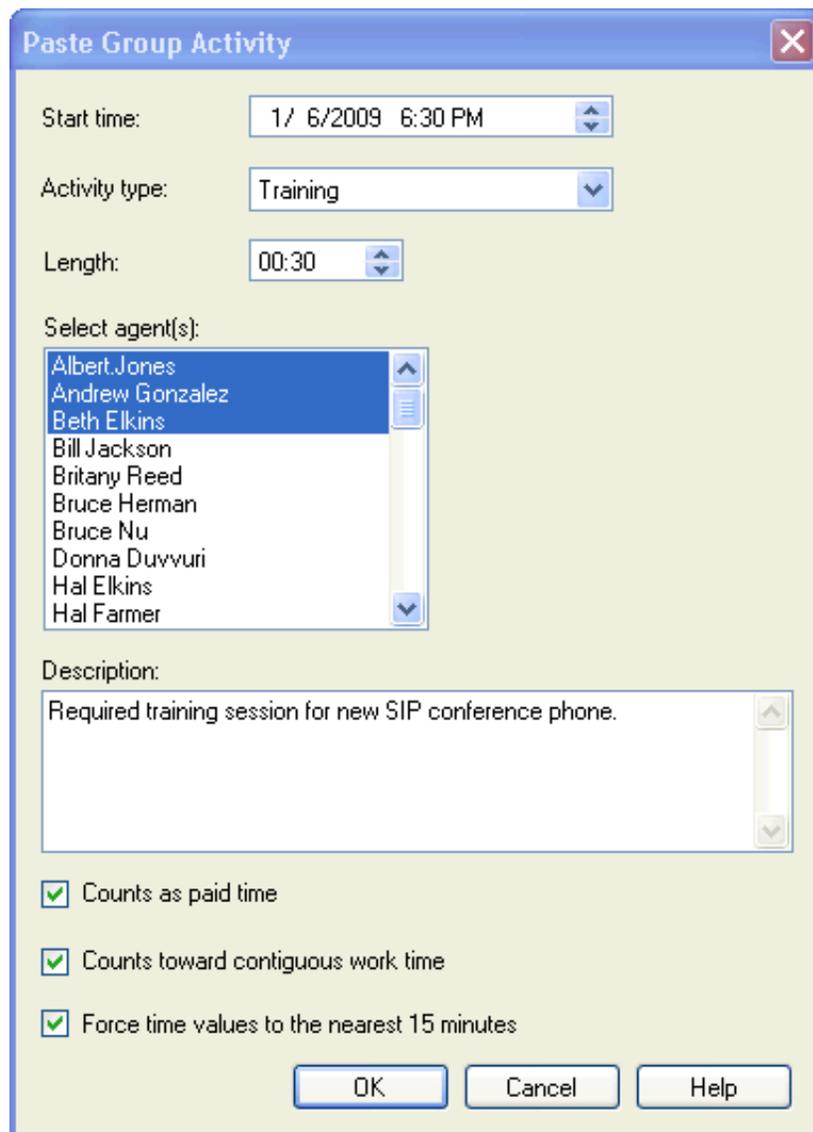
Select agent(s): The list of agents to include in the group activity.

Description: A description of the activity.

Counts as paid time: Select this check box if the activity counts toward paid time.

Counts toward contiguous work time: Select this check box if the activity counts towards contiguous work time.

Force time values to the nearest 15 minutes: When selected, this option rounds the start time and length to the nearest 15 minutes. For example, if you have a start time of 11:04 and a length of 29 minutes, it will round the activity times to 11:00 to 11:30.



The screenshot shows the 'Paste Group Activity' dialog box with the following settings:

- Start time:** 1/ 6/2009 6:30 PM
- Activity type:** Training
- Length:** 00:30
- Select agent(s):** A list of agents with 'Beth Elkins' selected. The list includes: Albert Jones, Andrew Gonzalez, Beth Elkins, Bill Jackson, Britany Reed, Bruce Herman, Bruce Nu, Donna Duvvuri, Hal Elkins, and Hal Farmer.
- Description:** Required training session for new SIP conference phone.
- Counts as paid time
- Counts toward contiguous work time
- Force time values to the nearest 15 minutes

Buttons at the bottom: OK, Cancel, Help.

Coverage Estimation Algorithm

Scheduled row values are determined by the coverage estimation algorithm, if a filter is applied (indicated with "filtered"). The coverage estimation algorithm determines approximately the percentage of each agent's time that should be spent handling interactions from each route group, depending on the agent's route group membership, and the forecast need for each route group. If there is no forecast need for some time period, then the scheduled row will have a count of 0, even when there are agents with an ACD activity type during that time period.

For example, if the filter is set to a workgroup called "Support1" and an interaction type of "Calls", then the forecast row count will add route groups that have Support1, Calls, English | Operating Systems, Support1, Calls , and Spanish | Operating Systems, and Support1, Calls, and English | Networking. However, the forecast row count does not include the values from a route group with Support1, Emails, and English | Operating Systems.

Note: Some rows may be hidden when the filtered data does not apply to the selected row. See the Filter and Sort options for more information.

Full Time Equivalent

Full time equivalent (FTE) is a person that works the number of hours in a week to qualify him as a full time employee.

Status Bar

The status bar displays the CIC server associated with the intraday monitoring information displayed in the workspace.



This is the name of the CIC server that Interaction Optimizer Administrator is connected to.

Menu Bar

Commands and actions are organized in menus that you use to work with Interaction Optimizer. Click a menu title on the menu bar to display a list of choices. To choose one of the commands listed on a menu, click it.

Navigation Pane Buttons

You can display the Interaction Optimizer module button as a large button. To do this, click the **Configure Buttons** arrow  and on the menu, select **Show More Buttons**.

Use Configure Buttons to change the order of modules displayed in the [Navigation Pane](#).

For more information on using the IC Business Manager interface, see the *Getting Started* online Help for IC Business Manager.

Navigation Pane

The Interaction Optimizer navigation pane provides easy access to its features in the following navigation panes: **Recent Schedules**, **Old Schedules**. It provides centralized navigation to schedules, which display their views in the workspace next to the navigation panes.

Paste Multiple Activities

Paste Multiple Activities

First activity start time: 12/28/2009 9:45 AM

Agent: Donna Lynch

All activities being pasted:

Activity	Length	Time after first activity
Meal	00:45	00:00
Meeting	07:15	00:45

Activity time options

Fill time gaps with ACD

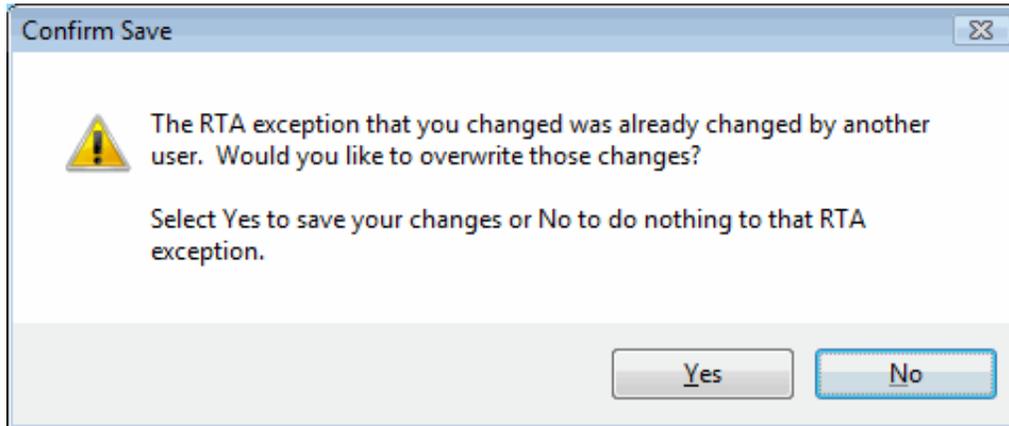
Make all activities contiguous (remove time gaps)

Force time values to the nearest 15 minutes

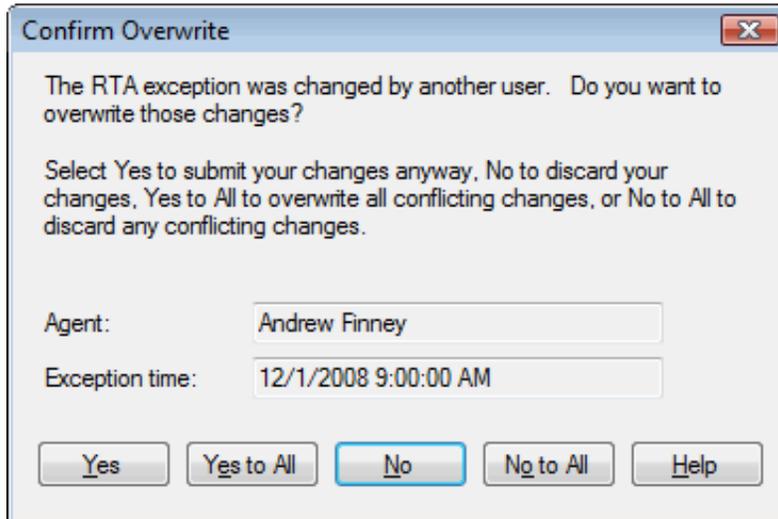
OK Cancel Help

RTA Exception Conflicts

When making changes to an RTA exception, there may be a conflict if another user or users have made changes to the exception as well. If one other user has made in addition to you, the system notifies you of a possible conflict:



If more than one user has made changes in addition to your changes, the system asks you to confirm:



Scheduling Navigation Pane

The **Scheduling** navigation pane allows authorized users to display the content of recently generated and older schedules by scheduling unit in the workspace. The schedules displayed may be currently live, schedules for future time periods, or schedules from previous time periods. The schedules may also be biddable or non-biddable.

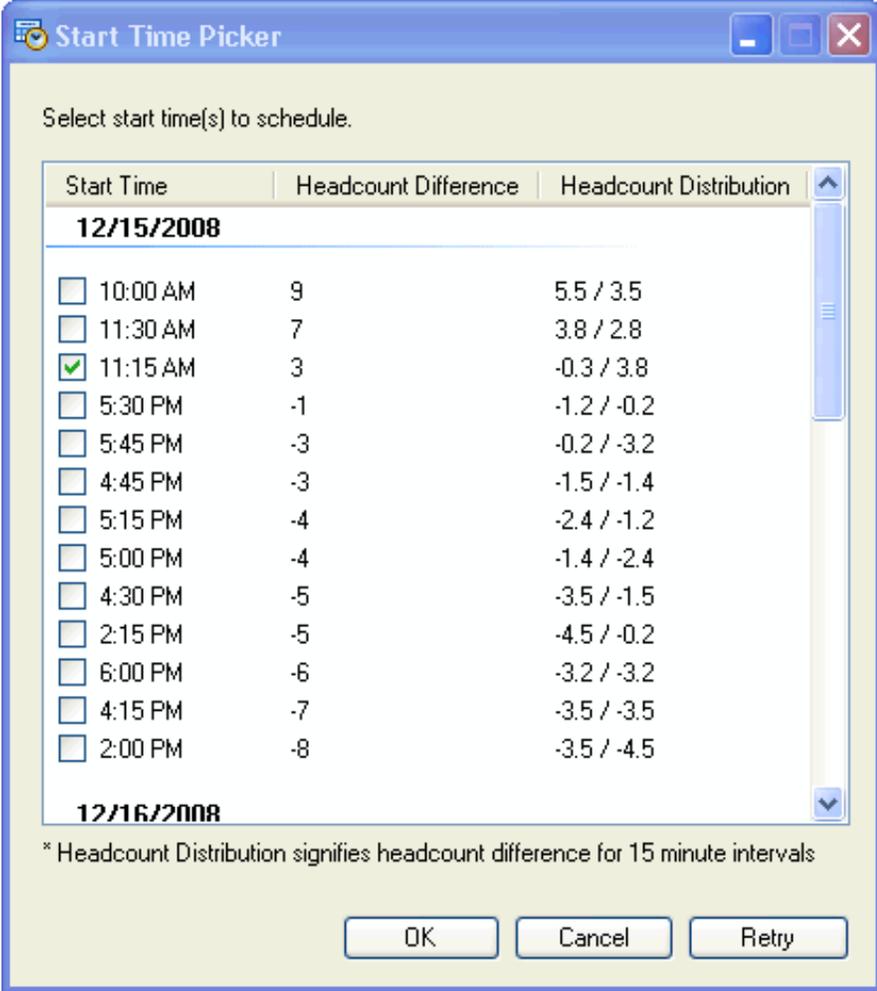
Click  to expand the schedule listings and select a schedule to view, or click  to collapse the listings.

The Scheduling navigation pane includes:

- [View Actual Work and RTA Exceptions](#)
- [Edit RTA Exception](#)
- [View Analysis and Summary Counts Area](#)
- [Export Data](#)
- [Display Graphs](#)
- [View Status Bar](#)
- [Use Filter and Sort Options](#)

Start Time Picker

The **Start Time Picker** dialog box appears if the **Show all feasible scheduling times for dates selected** option is selected when [scheduling a group activity](#). The resulting headcount differences between the forecast and scheduled agents for each date selected is displayed:



The Start Time Picker dialog box is titled "Start Time Picker" and contains the instruction "Select start time(s) to schedule." It features a table with three columns: "Start Time", "Headcount Difference", and "Headcount Distribution". The table is divided into two sections for the dates 12/15/2008 and 12/16/2008. The 12/15/2008 section has 13 rows of data, with the 11:15 AM row selected. The 12/16/2008 section is currently empty. Below the table, there is a note: "* Headcount Distribution signifies headcount difference for 15 minute intervals". At the bottom of the dialog are three buttons: "OK", "Cancel", and "Retry".

Start Time	Headcount Difference	Headcount Distribution
12/15/2008		
<input type="checkbox"/> 10:00 AM	9	5.5 / 3.5
<input type="checkbox"/> 11:30 AM	7	3.8 / 2.8
<input checked="" type="checkbox"/> 11:15 AM	3	-0.3 / 3.8
<input type="checkbox"/> 5:30 PM	-1	-1.2 / -0.2
<input type="checkbox"/> 5:45 PM	-3	-0.2 / -3.2
<input type="checkbox"/> 4:45 PM	-3	-1.5 / -1.4
<input type="checkbox"/> 5:15 PM	-4	-2.4 / -1.2
<input type="checkbox"/> 5:00 PM	-4	-1.4 / -2.4
<input type="checkbox"/> 4:30 PM	-5	-3.5 / -1.5
<input type="checkbox"/> 2:15 PM	-5	-4.5 / -0.2
<input type="checkbox"/> 6:00 PM	-6	-3.2 / -3.2
<input type="checkbox"/> 4:15 PM	-7	-3.5 / -3.5
<input type="checkbox"/> 2:00 PM	-8	-3.5 / -4.5
12/16/2008		

* Headcount Distribution signifies headcount difference for 15 minute intervals

OK Cancel Retry

The following information is displayed:

Start Time: This is the suggested group activity start time.

Headcount Difference: This is the difference between the forecast number of people and the scheduled number of people after scheduling the group activity.

For example, you are trying to schedule 4 people for a meeting from 2:00 pm - 2:30 pm. There are 9 people forecast, and 12 people scheduled for the 2:00 pm - 2:15 pm time slot. If the 4 people were to attend this meeting, that would leave 8 people working of the 12 people scheduled. Since 9 people were forecast and 8 are actually working, the headcount difference is -1 for this 15 minute time slot.

Continue calculating the difference for the 2:15 pm - 2:30 pm time slot (the next 15 minute interval). For this time slot, there are 11 people forecast, and 13 people scheduled. If the 4 people were to attend the meeting, that would leave 9 people working of the 13 people scheduled. Since 11 people were forecast and 9 are actually working, the headcount difference is -2 for this 15 minute time slot. Factoring the headcount difference for both 15 minute time slots (30 minutes for the group activity), the aggregate of the difference is -1 plus -2, so -3.

Headcount Distribution: This is the headcount difference for each 15 minute interval that is included in the 30 minute activity. Using the same example above, the distribution is listed as -1.0 / -2.0.

In the **Start Time Picker** dialog box, select the best possible time for the group activity. Multiple times can be selected to schedule multiple activities. Click **OK** to save the activity. Click **Retry** to return to the **Schedule Activity** dialog box and start over.

Note: The system calculates data every 15 minutes, providing the difference per every 15 minutes and the aggregate value of the difference for the total time period of the activity. This aggregate provides helpful scheduling information at-a-glance.

Tip: The **Headcount Difference** that is closer to 0 (or a more positive number), is the best time to schedule an activity.

Toolbars

Interaction Optimizer **toolbars** contain buttons that represent tasks you can do within the program. Click a button on the toolbar to perform the task. To display toolbars, from the **View** menu, point to **Toolbars** and on the submenu, select the toolbar you want to view.

View Schedule in Day Mode

Viewing a schedule in day mode (default view), displays 25 hours in the schedule; showing start time 1 hour before the earliest activity, and the end time 25 hours after the start time. Day mode allows editing of activities, as long as the schedule is for a future time period, or is the live (published) schedule.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

View Schedule in Multi-day Mode

Viewing a schedule in multi-day mode, displays daily schedules in hourly time slots, up to one week. Using the Start Time and End Time selection boxes, you can pick the start and end times to the nearest hour. Click Update to update the schedule contents after changing start and end times. Multi-day mode allows editing of activities, as long as the schedule is for a future time period, or is the live (published) schedule.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

View Schedule in Week Mode

Viewing a schedule in week mode, displays daily schedules in 24 hour (or shift) time slots, up to one week. Week mode allows editing of shifts (double-click to edit activities), as long as the schedule is for a future time period, or is the live (published) schedule.

Note: If you choose to edit a live schedule, changes will take effect immediately after publishing.

Workspace

Views selected from the Interaction Optimizer Home page, such as *Dec 15th Erlang Schedule* in the **Scheduling** area, are displayed in the Workspace.

Rename a Schedule Bid

You can rename a schedule bid from the Schedule Bids tab.

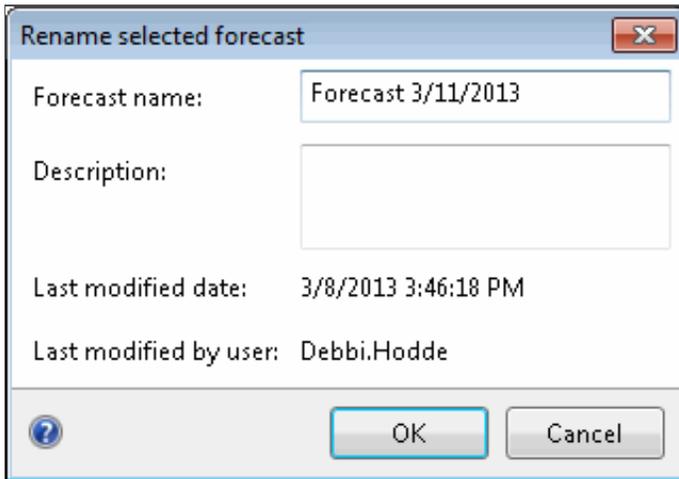
Note: Before you configure settings, make sure you select **Schedule Bids** from the **Scheduling** area of the **Interaction Optimizer Home** page.

To rename a schedule bid:

1. From the [Interaction Optimizer Home page](#), in the **Scheduling** area click the **Schedule Bids** link. The **Schedule Bids** tab opens.
2. Select the schedule you want to rename and click the **Rename** button. The **Rename Schedule Bid** dialog box opens.
3. In the **Schedule name** field, type an updated name for the schedule and click **OK**.

Rename Forecast dialog

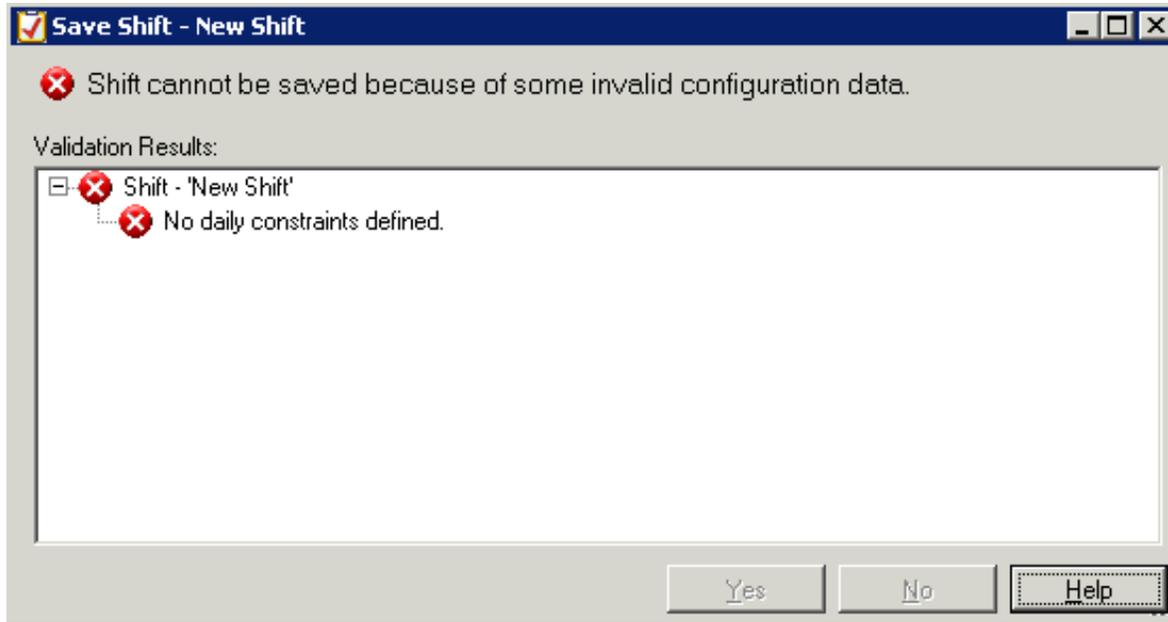
You can rename a forecast from the Forecast Editor.



To rename a forecast

1. From the Forecast Editor, select the forecast you want to rename and from the Interaction Optimizer menu choose **Rename Selected Forecast**, or right-click the forecast and choose **Rename selected forecast** from the menu that appears. The **Rename selected forecast** dialog box opens.
2. Make changes to the **Forecast name** or **Description** and click **OK**.

Save and Validate Shifts



Schedule Bid Generation

The **Schedule Bid Generation** dialog appears after you click **Finish** on the **Schedule Bidding Minimums and Maximums** page of the **Schedule Bid Generation Wizard**. You can perform any of the following actions in the Schedule Generation dialog:

- To copy the schedule generation information to the clipboard, click **Copy information to clipboard**.
- To save the information you entered so you can import it when creating schedule bids in the future, click **Save Inputs**. This option saves you time if you want to do "what if" scenarios where you only change a few parameters and create many different schedule bids.
- To save the information you entered so you can import it when creating schedules in the future, click **Save Support Log**. This option saves you time if you want to do "what if" scenarios where you only change a few parameters and create many different schedule.
- To view the schedule, click **Open Schedule**. The schedule appears in the view..

Schedule Shift Activities

This topic is reserved for a future release.

Scheduling Unit dropdown list

Use the drop-down list to select the Scheduling Unit you want to manage. To create a new Scheduling Unit, click the plus sign.

Select days from calendar dialog

Use the select days from calendar dialog to [add days to or remove days](#) from the forecast.

Select days from calendar for Monday, July 01, 2013

April, 2013							May, 2013						
M	T	W	T	F	S	S	M	T	W	T	F	S	S
25	26	27	28	29	30	31		1	2	3	4	5	
1	2	3	4	5	6	7	6	7	8	9	10	11	12
8	9	10	11	12	13	14	13	14	15	16	17	18	19
15	16	17	18	19	20	21	20	21	22	23	24	25	26
22	23	24	25	26	27	28	27	28	29	30	31		
29	30												

June, 2013							July, 2013						
M	T	W	T	F	S	S	M	T	W	T	F	S	S
					1	2							
3	4	5	6	7	8	9	1						
10	11	12	13	14	15	16							
17	18	19	20	21	22	23							
24	25	26	27	28	29	30							

Date	Classification
------	----------------

Remove selected Clear all

OK Cancel

Select Statistics dialog

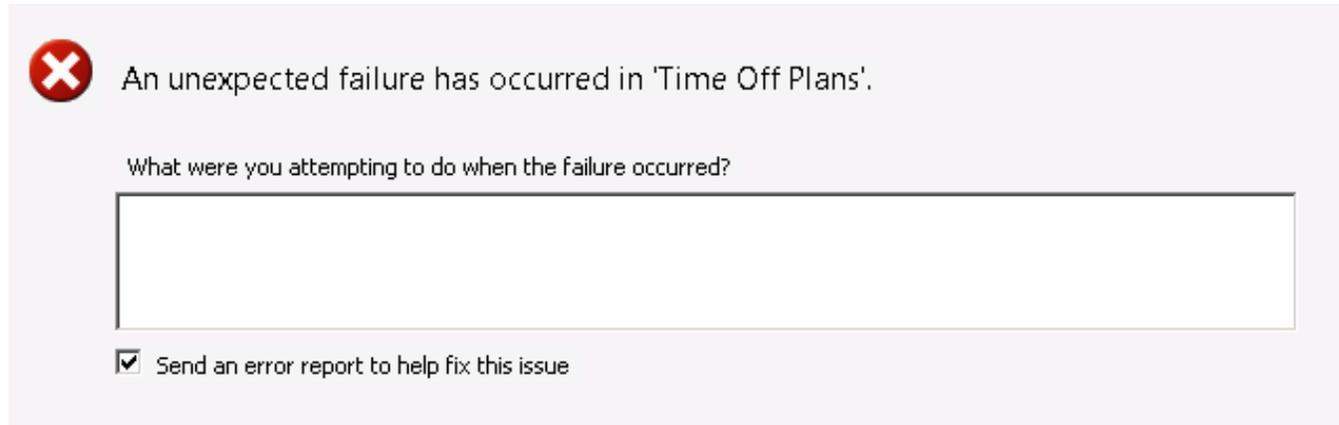
Use this dialog to change the selection of statistics displayed in the [Real Time Adherence view](#).

To manage statistics:

1. **Right-click** any statistic to open a shortcut menu.
2. Choose **Select Statistics...** to display this dialog.
3. The list on the left contains items that are not currently included in the view. The list on the right contains items selected for inclusion in the view.
 - Select statistics in the list on the left. Then click **Add** to move them to the other list. **Add All** selects all items for inclusion.
 - Use **Move Up** and **Move Down** buttons to optionally change the display order of columns in the view.
 - To exclude statistics from the view, select items in the list on the right. Then click **Remove**. The **Remove All** button excludes all statistics from the view, but at least one must be included.
4. Click **OK** when finished.

Send an error report to Genesys

This is similar to the customer experience program, but it only sends data when an exception occurs.



 An unexpected failure has occurred in 'Time Off Plans'.

What were you attempting to do when the failure occurred?

Send an error report to help fix this issue

Allow the user to tell us what they were trying to do, capture error context/info, the model that caused the issue, do a mini-snapshot, package it all up and send it through our customer experience improvement process into a new errorreport subdirectory. Process would kickoff when they select to reload previous view or close the error view. We'd default the check box to be selected unless previously de-selected.

Genesys strives to consistently improve the quality, efficiency, and performance of Interaction Optimizer. You can help by participating in the Customer Experience Improvement Program. If you choose to participate, Genesys collects statistical information from your system and uses it only to help improve Interaction Optimizer features and enhancements and to help resolve issues.

Genesys does not share this information with other companies, nor does it use your data for marketing or sales purposes. All information is confidential. Participation is voluntary and you can opt in or out at any time.

Participate in the program

1. From the **Interaction Optimizer Home** page, open the **Interaction Optimizer** menu and select **Customer Experience Improvement Program**.
2. Select **Join the Interaction Optimizer Customer Experience Improvement Program** and click **OK**.

Opt out of the program

1. From the **Interaction Optimizer Home** page, open the **Interaction Optimizer** menu and select **Customer Experience Improvement Program**.
2. Select **I do not want to join the program at this time** and click **OK**.

Source Data dialog

Note: AI-powered forecasting determines the source data to use for a forecast. Therefore, the Source Data dialog is unavailable for an AI-powered forecast.

Use the **Source Data** dialog to decide which historical days the system should use to forecast. The Source Data dialog displays offered, abandoned, average handle time (AHT), average talk time (ATT), and average ACW time (for after call work). The rows show graphs with totals or averages that help supervisors determine if the day is a good representation of expected future behavior. If a day is not a good representation, give it a day classification to exclude it from the current and future short-term and long-term forecasts.

In the daily rows, the system weights the averages displayed under the AHT, ATT, and ACW graphs using completed interactions, which match intraday monitoring. However, the forecast row at the bottom weights these averages using Offered (Number of Interactions). Because forecast modifications affect offered interactions and do not affect completed interactions, this method matches the forecast but it means the forecast row values for AHT, ATT, and ACW do not appear to match the daily rows.

For more information, see the related topics.

Time Off Request dialog box

Use this dialog box to add, edit, approve, or deny time off requests, based on the scheduling unit and the agent.

Agent

Click the arrow at the end of the drop-down list to select a specific agent in the selected scheduling unit for the new time off request. You cannot change the agent after you create the request.

Activity Code

Click the arrow at the end of the drop-down list to select a specific [Activity Code](#) to apply to the time off request.

Type

Select the time off request type for the new or existing request. Options include:

- **Full Day:** Select this option for a full day time off request.
- **Partial Day:** Select this option for a partial day time off request. If this option is selected, the default start time is the shift start time.

State

Select the time off request state for the new or existing request. Options include:

- **Pending:** Select this option to set the time off request's state to pending. This is the default value if entering a new time off request.
- **Approved:** Select this option to set the time off request's state to approved.
- **Denied:** Select this option to set the time off request's state to denied.

Start

Select the start date of the new or existing time off request from the pull-down menu. If this is a partial day request, the default start time is the shift start time.

End

Select the end date of the new or existing time off request from the pull-down menu.

Length

Use the up and down arrow keys to set the length in hours of the time off request per day. The default value is 8 hours (08:00). Acceptable values are 15 minutes (00:15) through 23 hours and 59 minutes (23:59).

Use Paid Time

Select this check box if this time off request is considered paid time.

Notes

Optionally enter the description of or notes about the time off request.

Submitted by

This field displays the person who enters the request in Interaction Optimizer or in Interaction Client.

Not reviewed or Approved by

This field displays the person who approves or denies the time off request in Interaction Optimizer. If the request has not been approved or denied, this field appears as "Not reviewed."

Note: The system checks current time off requests in the database and if overlapping or duplicate requests are found, Interaction Optimizer generates a warning message.

Understanding automatically approved time off requests

In order for the processing engine to automatically approve a time off request and place it in the **approved** state, the agent and the request must meet the following conditions.

An agent who submits a time off request must:

- Belong to a scheduling unit and a coverage group when the processing engine processes the time off request.
- Be associated with a valid accrual plan for the activity code the agent selects in the time off request.
- Have enough accrued hours to be eligible for the requested time off.
- Have enough accrued hours to accommodate any previously approved time off requests for a future date.

In addition, to the agent conditions, the time off request must meet the following requirements for automatic approval:

- All the days in the time off request must be included in an active time off plan.
- The accrual plan must be configured to allow automatic approval.
- The days in the time off request cannot be a designated blackout day from the time off plan.
- Enough allotments, based on length of time off request, should exist on the particular day of time off request based on coverage group. The system makes this calculation by looking at assigned allotments and subtracting approved time off requests for agents who belong to the same coverage group. This is only required if the accrual plan counts towards allotment.

Note: When an agent submits a time off request, and the agent belongs to an accrual plan that does not count toward allotment, the request is bypassed for automatic approval checks. For example, if an accrual plan for Jury Duty is not counted towards allotments, then the time off request could be auto-approved even if no allotments remain for that day.

If the time off request meets the above requirements, the processing engine automatically approves the request. For more information, see the **Related Topics**.

Understanding automatically denied time off requests

In some cases, the processing engine automatically denies a time off request. The potential for automatic denials is only available if your site uses the time off planning feature. If you do not use time off planning, automatic denials are unavailable.

A time off request may be automatically denied if:

- A time off request is not spanned by an active time off plan during any portion of the request. An agent must submit a time off request during a period where an active time off plan exists. A time off request can span multiple active and adjacent time off plans.
- The agent who submits the time off request does not have enough accrued hours. If the accrual plan requires that the accrual balance be large enough at the time of the submission and the accrual balance is less than the number of hours in the time off request, the request will be waitlisted or denied. If the accrual plan requires that the accrual balance be large enough at the start of the time off request, the system will calculate how many hours will be added to the accrual balance before the time off request starts. If the accrual balance will not be high enough, the request will be waitlisted or denied. The system determines whether to waitlist or deny the request based on the waitlist cap settings on the accrual plan.
- A lack of enough accrued hours and failing the waitlist cap check happens, based on the time that the request was submitted.
- The time off requests includes any full or multiple days that fall on a black out date, and the request is submitted by an agent whose accrual plan count towards allotment.
- A request exceeds the allotment and waitlist cap settings as defined on the accrual plan.

If the agent does not have enough accrued hours, the processing engine denies the request. For more information, see the **Related Topics**.

Understanding pending or waitlisted requests

In Interaction Optimizer, time off requests in a pending state are considered to be waitlisted.

The processing engine places a time off request in the pending state if the request is still being processed and confirmation of eligibility for approval has not been confirmed. A time off request may be placed in pending status if:

- No active time off plan exists in the system.
- An agent does not belong to a scheduling unit or coverage group at the time the request is processed.
- An agent has not accrued enough time off hours, based on the configured reference date, but the waitlist capping hours still remain on the time off accrual plan.
- The time off request contains an activity code not defined in the agent's accrual plan.
- The agent's accrual plan is not configured to automatically approve time off requests.
- The time off request does not meet allotment availability, but enough time remains in the accrual plan's waitlist capping setting.
- An agent has accrued enough hours at the time the request is submitted, but that request would invalidate any previously approved time off requests for a future date.

For more information, see the [Related Topics](#).

Validate Base Schedule Edits

After you edit a base schedule, the system validates it.

To validate a base schedule:

1. In the **Scheduling** navigation pane, expand the scheduling unit name node and then expand the weekly schedule node.
2. Double-click the schedule.
3. In the view, right-click the agent and then click **Edit Base Schedule**. The Edit Base Schedule dialog box appears.
4. Make your changes to the schedule and then click **OK**. The Validate Base Schedule dialog box appears.

Tip: You can copy the validation results to the clipboard by clicking **Copy information to clipboard**.

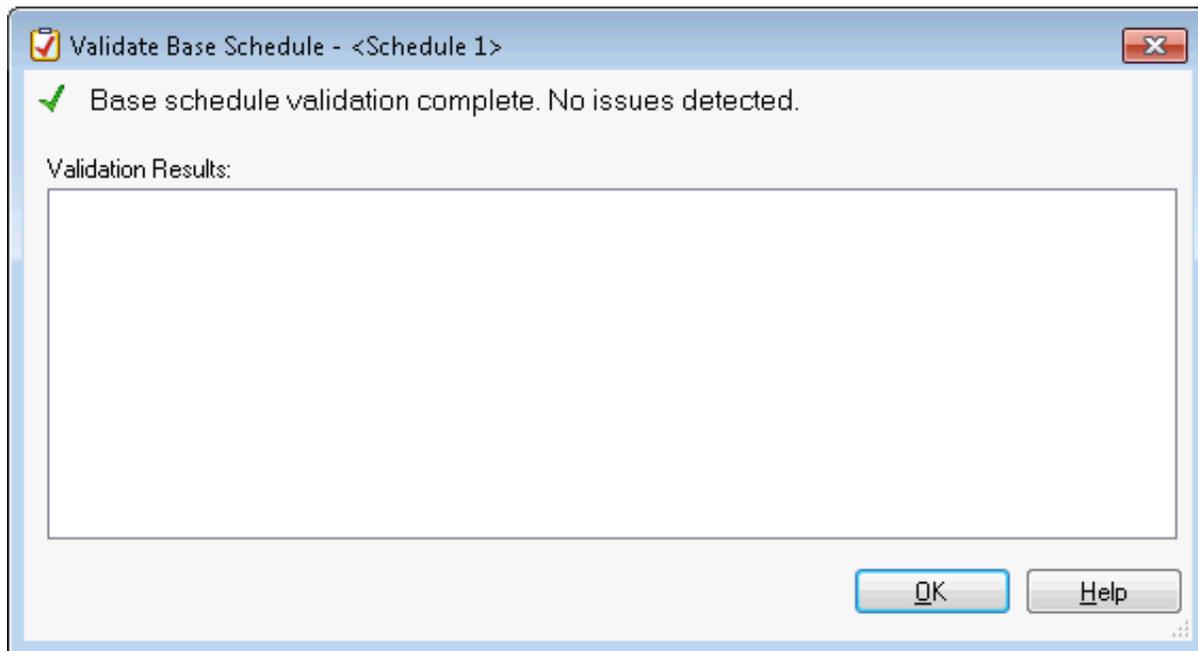
Validate Base Schedule

You can validate a base schedule for an agent before the bid window opens if you edited the schedule bid and created a schedule that violates some of the constraints of the shift in a way that no base schedule could be created. If the edits are not valid, the schedule bid cannot be saved until you change the schedule. In this scenario, you can use the Validate Base Schedule dialog box to show you more details about what is invalid.

Validation is not necessary if you have not edited the schedule bid.

To validate a base schedule:

1. From the [Interaction Optimizer Home page](#), in the Schedule Bids area select the appropriate schedule bid from the Schedule Bids drop-down list and click the **Open selected schedule bid** link. The selected schedule opens.
2. Right-click the agent to validate and then click **Validate for Base Schedule**. The schedule bid is validated to determine if it can be used to create a base schedule. The validation results are displayed in the **Validate Base Schedule** dialog.



Change log

Date	Changes
27-March-2014	<p>4.0 SU 5</p> <p>Note: In the next release, 4.0 SU6, the majority of workforce management will be available only in the Interaction Optimizer module of IC Business Manager. Most functionality, with the exception of agent constraints and rights assignments, will no longer be available in Interaction Administrator.</p> <hr/> <p>Scheduling unit management</p> <p>In the Interaction Optimizer module of IC Business Manager, within a scheduling unit you can partition workgroups, interactions, and users into logical groups that Interaction Optimizer schedules together. Scheduling units enable you to create, manage and view forecasts, schedules and adherence events for a group of workgroups as a single unit. For more information about customizing criteria for a scheduling unit, see the following topics:</p> <ul style="list-style-type: none">• Create service goal groups to define common service goals, associate the goals to specific workgroups, and link the group to a specified scheduling unit.• Create schedule and forecast names and configure date format to specify a default name for new forecasts and schedules.• Configure how many weeks of data to use in the forecast to determine the amount of ACD data to include in the forecast. Select a number of weeks from which retrieve data, omitting excluded days. Select a number of occurrences to retrieve data for the number of instances, regardless of the number of weeks.• Set Agent schedule preference versus coverage focus to select the level to which an agent schedule preference impacts schedules, set agent deferred work threshold to prevent occupancy from becoming too high, manage shrinkage, and enable or disable activity bidding.• Select adherence exception settings and conformance calculations to configure how many minutes to excuse and select which activities are considered for performance. <hr/> <p>Activity codes</p> <p>Add an activity code from the Activity Codes link on the Interaction Optimizer Home page. Activity codes are sub-sets of activity types, which act as containers for the activity codes. This feature allows you to customize and better define the activities your organization uses. Use activity codes in schedules, shifts, and time-off requests, as well as shrinkage reporting and detailed schedule editing of future, current, and past schedules. Customized activity codes help define the activities your organization uses. Use activity codes wherever you use activity types. In an Activity Type container, the activity type appears as the default activity code. You cannot edit the default activity code. Administrators can use activity codes to help define scheduling needs. For more information about activity codes, see Working with activity codes.</p> <hr/> <p>Status mapping</p> <p>On the Status Mappings tab, you can map a status to an activity type. Activity types identify a specific agent action and is required to determine whether agents are following their schedules. This information is used to calculate real time adherence and adherence exceptions. When an agent changes status in Interaction Client, that agent will be either in adherence or out of adherence, depending on the "status to activity" mapping. Initial mappings are set by Interaction Optimizer Server on the first start-up when properly licensed. New status messages will be mapped to the "Unscheduled" activity. Status messages will retain their previous mapping if they are deleted and then re-created.</p> <p>For more information about status mapping, see Map status messages to activity types.</p> <hr/> <p>Time off requests</p>

Use the new [Time Off Requests](#) tab to search for existing time off requests, or to add, edit, remove, approve or deny requests, based on scheduling unit and agent.

Note: Currently, you can manage time off requests for a scheduling unit in both Interaction Administrator and in the Interaction Optimizer module of IC Business Manager. In a future release, the ability to manage time off requests will only be available in the Interaction Optimizer module of IC Business Manager.

Adherence exceptions

Beginning in IC 4.0 SU5, adherence exceptions are calculated based on the current schedule and the agent's actual status at the time of the exception. If a workforce management administrator changes the schedule, Interaction Optimizer recalculates the adherence exception and, depending on the outcome, it may no longer appear. Excusing exceptions in the Adherence Exceptions view will change the schedule so that it matches actual agent work performed.

An agent's status setting is used to track his or her adherence to the published schedule. Adherence to the published schedule is defined as an agent's status being consistent with his or her currently scheduled activity. For example, if an agent is scheduled to be taking calls (Scheduled ACD) but his or her current status is "On Break," this difference from the schedule creates an adherence exception.

Adherence exceptions are the basis for the time out of adherence statistics for each agent. These statistics can be monitored in Interaction Supervisor. Supervisors can review and manage adherence exceptions. A supervisor can completely or partially excuse any adherence exception.

For more information about adherence exceptions, see [Understanding adherence management](#) and [Select adherence exception settings and conformance calculations](#).

Shift rotations

You can [add shift rotations](#) and [assign agents to a rotation](#) so that the agents can start on different weeks with different shift start times. You can use shift rotations to ensure fairness in agent schedules. For example, use it to configure an agent to work weekends every fourth week.

By setting a shift rotation to an agent that is assigned to several shift definitions, the agent avoids monotonous scheduling week after week. [View the shift rotation report](#) to see how a rotation is applied to the selected agent assignment.

New scheduling engine

Beginning in 4.0 SU5, Interaction Optimizer includes an enhanced scheduling engine that more accurately schedules agents at optimal times. This new scheduler produces schedules that provide a higher service level when using the same number of agents for shifts flexible enough for this advanced algorithm. Because the new scheduling engine incorporates improved calculation features, it produces schedules at a much slower rate than in previous versions. In addition, the enhanced scheduling engine now supports [deferred work](#) when calculating schedules.

Customer Experience Improvement Program

Genesys strives to consistently improve the quality, efficiency, and performance of Interaction Optimizer. You can help by participating in the [Customer Experience Improvement Program](#). If you choose to participate, Interactive Intelligence collects statistical information from your system and uses it only to help improve Interaction Optimizer features and enhancements and to help resolve issues.

Genesys does not share this information with other companies, nor does it use your data for marketing or sales purposes. All information is confidential. Participation is voluntary and you can opt in or out at any time.

07-July-2014

4.0 SU 6

Note: In this release, the majority of workforce management is available only in the Interaction Optimizer module of IC Business Manager. Most functionality, with the exception of agent constraints and rights assignments, is no longer available in Interaction Administrator.

Service goal group updates

The Move Service Goal Groups dialog box is renamed to Move Workgroups. For more information, see [Move a workgroup to another service goal group](#). Also, a new topic, [Edit a workgroup's interaction type within a service goal group](#), describes how to add or remove the interaction types assigned to any workgroup associated with a particular service goal group.

Create and manage staff types and coverage groups

Create staff types to group agents that belong to the same workgroups and handle similar interaction types and skills, and to ensure agents in one type or category are not granted time off on the same day. For more information, see [About staff types](#).

Monitor agent information in the new Agent Details view

The Agent Details View displays a variety of information about agents on one tab, including start and end dates; accrual reference dates; team, workgroup, and agent group assignments; and shift schedules and rotations. You can also add and manage agents within teams. For more information, see [About the Agent Details view](#) and [Add agents to a team](#).

Use the new Time Off Planning features

Interaction Optimizer's time off planning features automates the process of approving time off requests, alleviating the time administrators spend performing this task manually. It includes:

- [Accrual plans](#), which show the rate at which groups of agents receive more time off in specified activity codes.
- Time Off Plans, which allow you to manage the allotments of time off per staff type. The processing engine automatically approves, waitlists, or denies time off requests. For more information, see the [Allotment editor overview](#).
- [Time Off Requests](#), where you can search for existing time off requests, and also add, edit, cancel, approve or deny requests, based on scheduling unit and agent.

For more information, see [Time Off Planning overview](#) and [About automatic time off processing](#)

Manage time off requests

In SU6, you can cancel time off requests in Approved or Pending status, but not Denied status. The ability to delete time off requests was removed. For more information, see [Cancel time off requests](#) and [Add time off requests](#).

Export coverage to Excel

You can use the [Export Coverage to Excel](#) feature to export the current scheduled or forecast full-time equivalent agents per route group for each interval into an Excel file. The file can be saved to another location and renamed for future use.

View the Upgrade Log

The Upgrade Log lists data changes performed when a service update is applied. Service updates automatically apply changes that move data to new tables or improve the quality of Interaction Optimizer data. You can access the [Upgrade Log](#) from the Interaction Optimizer Home page, or from the Agent Details view.

04-November-2014	<p>2015 R1</p> <p>Updated documentation to reflect changes required in the transition from version 4.0 SU# to CIC 2015 R1, such as updates to product version numbers, system requirements, installation procedures, references to Interactive Intelligence Product Information site URLs, and copyright and trademark information.</p>
10-February-2015	<p>2015 R2</p> <hr/> <p>Long-term forecasting</p> <p>Introducing the ability to generate a long-term forecast that includes calculations for volume, AHT and required staff for a weekly level. You can edit and create modifications for the forecast and required staff. In Time Off Plans, administrators can select a long-term forecast, which directs the time off plan to use the required staff numbers from the long-term forecast. To get started, see Working with long-term forecasts.</p> <hr/> <p>Manage day classifications</p> <p>Additional feature allows you to create day classifications and assign them to specific days. For more information, see Manage day classifications and Assign day classifications to specific days.</p> <hr/> <p>Deleting forecasts</p> <p>For information about when you can and cannot delete a forecast, see About forecast deletion.</p> <hr/> <p>Synchronize time off activities and requests</p> <p>Because approved time off requests help determine an agent's accrual balance, time off requests must match activities in a schedule. For example, if an agent is listed on the schedule for vacation, but the backing time off request has been cancelled, Optimizer will not deduct the time from the agent's accrual balance, even though the schedule shows the agent does not have to work. Workforce management administrators should, when managing time off requests, always add, edit, and cancel the requests in the time off request view. After the administrator makes time off requests that affect scheduled activities, he or she should synchronize them in the affected schedule. For more information, see Understanding time off synchronization and Synchronize time off requests and time off activities.</p> <hr/> <p>Tips and troubleshooting</p> <p>See Tips and troubleshooting for help with minor troubleshooting and performance tips.</p>

11-August-2015

2015 R4

General enhancements

When you create or edit an activity code you can select to ignore the activity code for adherence. The Activity Codes tab now includes an Ignore for Adherence check box. Selecting to ignore the activity code for adherence does not impact conformance.

When viewing work information on a schedule or in the Adherence Exceptions view, you can now view the user status in addition to activity.

Shift trading configuration and management

Shift trading enables agents to trade daily shifts or parts of a shift with other agents based on business rules that the scheduling administrator configures. This feature increases agent satisfaction and also decreases the amount of time that the administrator spends manually changing schedules. To get started, see [Work with shift trades](#), [About Shift Trading configuration](#), and [About the Shift Trading Requests view](#).

Change the forecast within a schedule

When schedules are created weeks in advance, it's possible that the volume forecast used is not as accurate as a new VF that can be created 2-3 weeks later. Administrators or supervisors now have the ability to change the forecast associated with a schedule. For information, see [Change the forecast associated with a schedule](#).

Additional server parameters

Added descriptions of Optimizer server parameters. For more information, see [Optimizer server parameters](#).

03-November-2015

2016 R1

General enhancements and updates

- A scheduling unit name cannot contain any of the following characters: /, \, |, &, ', ^, =, +.
- Previously, exceptions were calculated up until an hour in the past for the current week's schedule. This behavior is changed to make sure its available until current time. The schedule editor now displays up-to-date adherence exception data.
- When in "week" view, administrators can choose to view the individual activities of each day, rather than show the entire shift as one item. Administrators cannot move or change individual activities in week view. For more information, see [Change Activity Colors](#).
- Updated Start Date and End Date descriptions to reflect implementation and use in [Manage the Agent Details](#) view.
- Clarified ability and use cases for disabling calibration in adjusting schedule forecast and scheduled requirements. See [Set agent schedule impact, deferred work threshold, unstaffed shrinkage, and activity bidding preferences](#) and [About schedule calibration](#).
- Added a note to filter and sort topics for schedule and schedule bids: Because agents have not yet been assigned to a specific schedule for the week, filtering a schedule bid by workgroup, interaction type, skill set, or team is unsupported.
- Updated [Configure unplanned shrinkage](#) to reflect the ability to return selected or all percentages back to the default values.

09-February-2016	<p>2016 R2</p> <hr/> <p>General enhancements and updates</p> <ul style="list-style-type: none"> You can select more than one modification at a time. This is helpful when you want to move or delete multiple modifications. For more information, see Manage a modification. Updated options available for schedule display. For more information, see Change Display.
01-November-2016	<p>2017 R1</p> <hr/> <p>Export time off request data</p> <p>You can export the data in the Time Off Requests tab to an Excel spreadsheet. For more information, see Export a list of time-off requests.</p>
08-August-2017	<p>2017 R4</p> <p>Removed references to Interaction Client .NET Edition.</p> <p>Updated description of User last checked value for rounding activities option. For more information, see Change Display.</p>
20-February-2018	<p>2018 R2</p> <p>Rebranded terminology.</p>
15-May-2018	<p>2018 R3</p> <p>Updated description of Minimum Contiguous Work Time in the Configure Shifts topic.</p> <p>Deleted obsolete topic -Set Agent specificity for forecasting and scheduling requirements.</p>
21-August-2018	<p>2018 R4</p> <p>Updated View actual work and RTA exceptions topic and Edit RTA exception details topic changed to Excuse RTA exceptions.</p>
13-November-2018	<p>2018 R5</p> <p>Removed duplicate topic from table of contents.</p>

19-February-2019	<p>2019 R1</p> <p>Social conversations and social direct messages were added as interaction types in Scheduling Unit Service Goal Group, Agent Group, and Staff Type configuration. Both types can be selected in Forecasts. Time Off Requests configuration properly displays both new interaction types as well as the ability to sort by either new type.</p> <p>Updated Add a forecast modification topic.</p> <p>Updated Create a new forecast topic.</p>
28-February-2019	Created this change log.
01-May-2019	<p>Added note for limit of 255 activity codes per activity type to Working with activity codes topic and Add an activity code topic.</p> <p>Updated to include AI-powered forecasting.</p>
16-May-2019	Updated AI-powered forecasting and Local forecasting topics to explain creating multiple forecasts. Added updated image of Forecasts tab.
28-May-2019	Fixed links to <i>PureConnect AI-Powered Workforce Management Technical Reference</i> .
24-July-2019	Updated to include AI-powered scheduling.
06-September-2019	Added Operating Limits topic to Configuration section.
17-September-2019	Updated screen shot in Agent Groups Tab topic.
10-December-2019	Updated "Use the Intraday Monitoring Data Table" topic to clarify wording in note.
20-February-2020	Updated description of "Notify Successful merge on save" in Change Message topic. Removed screen shot from Real Time Adherence Overview topic.
28-May-2020	Fix links in OSA Analysis and Summary Counts topic.
03-June-2020	Updated Configure Advanced Reforecast Settings topic.
05-June-2020	Deleted Paste Single Activity topic because not used.
21-July-2020	<p>Updated Paste Group Activity topic.</p> <p>Added video for how to view Operating limits.</p>