



Forecasting Analysis

Webinar handout
Version: July 20, 2023



phone 877-668-6870
web CommunityWFM.com

3400 Waterview Parkway, Suite 325
Richardson, Texas 75080



Table of Contents

About this document.....	2
Why review past forecasts?	2
What’s the difference between forecast reporting and forecast analysis?.....	3
Running reports for past forecasts.....	3
Overview	4
Step-by-step	4
Contact volume and handle time	4
Shrinkage Forecast.....	5
Enterprise model forecast (if using the EM default shrinkage)	5
Shrinkage forecast report (if using a shrinkage forecast profile).....	6
Shrinkage actuals.....	7
How to use the spreadsheet.....	7
Evaluating the results.....	8
What about agent behavior?.....	8
Revising your forecast.....	9
Activity level revision.....	9
Step-by-step	9



About this document

This document accompanies the CommunityWFM College webinar *Forecasting Analysis*. It includes additional details and step-by-step instructions for completing the tasks discussed during the webinar.

The analysis method described in the webinar includes using a separate Excel workbook for recording contact center data.

Why review past forecasts?

Analyzing your past forecasts and determining how accurate they were can help you refine your future forecasts to have better predictions of your staffing requirements. Forecasting uses projected contact volumes, AHT, and shrinkage to predict the staffing required to meet your set service metric goal.

Forecast analysis is the **review** part of the WFM cycle of Planning > Scheduling > Reviewing.

How often do you review your old forecasts?

How accurate was your last forecast?

While forecasting is all about looking to the future, it's a good idea to look back and determine how accurate your past forecasts have been. If you don't analyze past performance, you won't be able to identify areas and trends where you can make improvements.

For example, if you always use a 4-week rolling forecast profile, you aren't accounting for seasonality, which exists for most contact centers. With a years' worth of data, you can predict staffing needs and identify recurring issues.

By identifying seasonal trends, you will know where to adjust your forecast. Is your center busier in the 4 weeks prior to Christmas? Is there a summer slump in August?

Analyzing your forecasts is like doing a tune-up on your car. It will help keep things running smoothly.



Areas to review

- Did your call volume come in as expected?
- How did your forecast AHT compare to the actual?
- Was shrinkage what you planned? If you are using the shrinkage defaults from the Enterprise Model, how accurately did it match the actual shrinkage?

What’s the difference between forecast reporting and forecast analysis?

Reporting summarizes raw data to show the performance of the call center. It is the *What*, but not the *How* or *Why*. Analysis looks for patterns and trends in those reports to identify areas for improvement.

Running reports for past forecasts

You can run reports for multiple weeks, then use the “week” filter view to grab the numbers for multiple weeks at the same time.

FORECAST CONTACT VOLUME REPORT
 Report run for Community Enterprise Model starting on 29 May 2023 through 25 Jun 2023
 Report run time 11 Jul 2023 09:52 am

Navigation: Date [Week] Month | Contact Volume | Average Handle Time

Week	Forecasted Contacts	Actual Contacts	Contact Variance	% of Total	Forecasted AHT	Actual AHT	AHT Variance	% of AHT
29 May 2023	10196.00	10460.00	-264.00	24.93	327.55	338.01	-10.46	99.89
05 Jun 2023	10189.00	10460.00	-271.00	24.92	326.88	338.01	-11.13	99.69
12 Jun 2023	10184.00	10460.00	-276.00	24.90	326.75	338.01	-11.26	99.65
19 Jun 2023	10323.00	10460.00	-137.00	25.24	330.42	338.01	-7.59	100.77



Overview

1. Run the published forecast and shrinkage reports for past weeks, preferably at the activity or folder level.
2. Enter the data into the Excel spreadsheet (CommunityWFM_Forecast-Analysis-and-Shrink).
3. Compare projected vs actuals (variances) and analyze for patterns and trends.

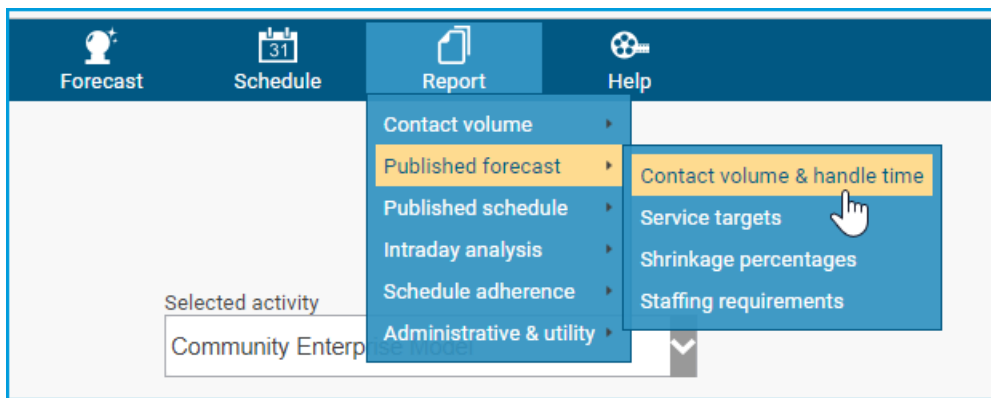
To view the call volume and AHT history, you can look at working or published forecasts.

To view actual shrinkage, run the published schedule shrinkage report (not a shrinkage forecast report).

Step-by-step

Contact volume and handle time

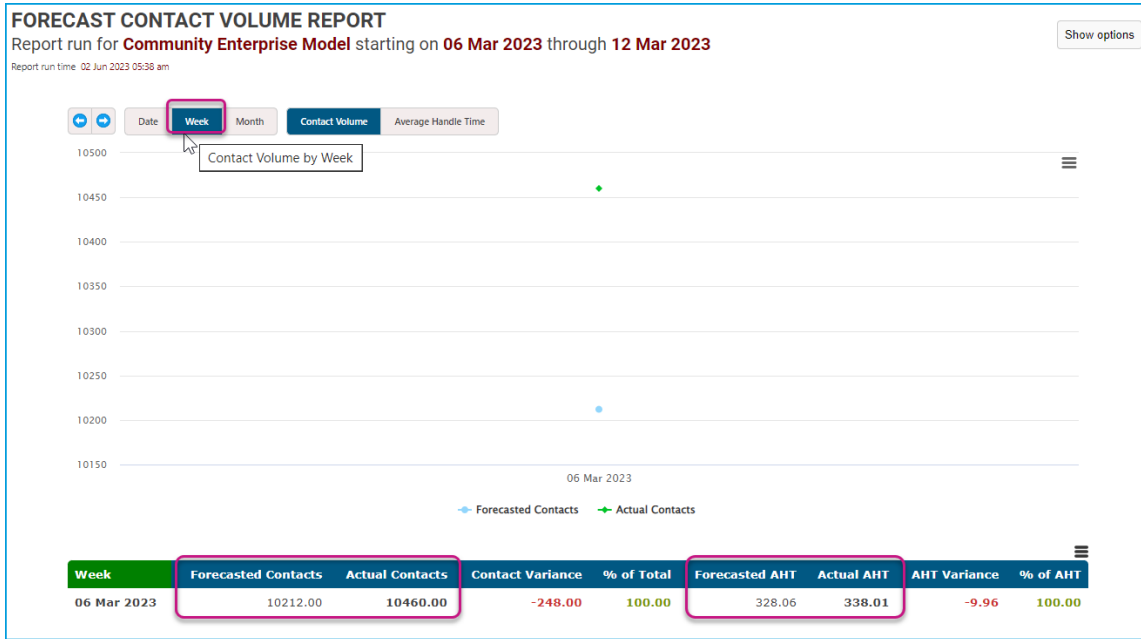
1. Go to Report > Published forecast > Contact volume & handle time.



2. Click *Show options* to expand the report menu.
3. Select the activity and date range in the past.
We recommend running the report on a Monday or Tuesday for the prior week.
4. Click *Apply options*.



- Change the filter to show the full week(s).



- Review the forecasted and actual contacts and AHT and enter the data into the Excel spreadsheet. The spreadsheet will calculate the variance.

Forecasted Contacts	Actual Contacts	Total Contact Variance	Forecast Contact Variance Percentage	Forecasted AHT	Actual AHT	Total AHT Variance	AHT Variance Percentage	Forecast Discretionary Shrinkage	Ac Discre Shrir
10212	10460	-248	2.4%	328	338	-10	3.0%		
		0	0.0%			0	0.0%		

Shrinkage Forecast

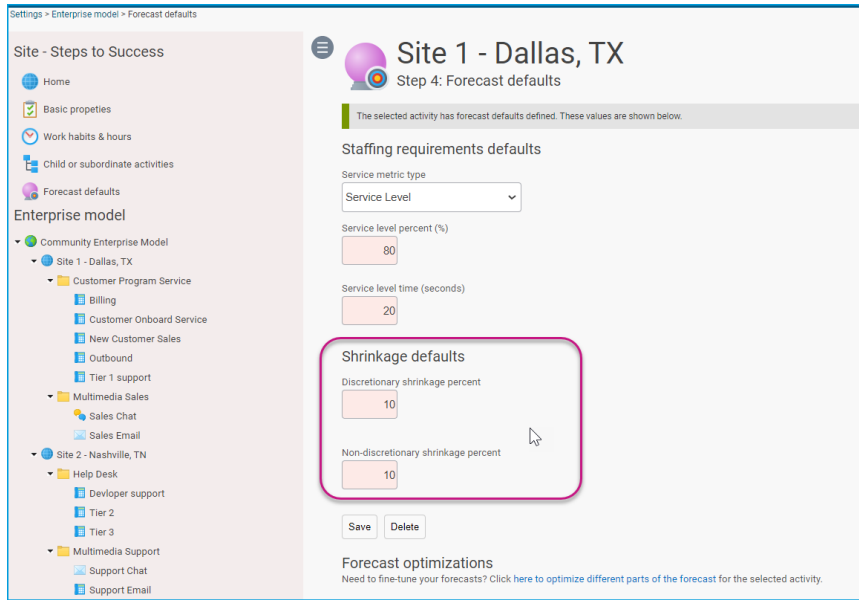
Next, look at the forecast shrinkage values. Did you use the Enterprise Model forecast shrinkage defaults? Or a shrinkage forecast profile? Enter the forecast shrinkage percentages into the spreadsheet.

Enterprise model forecast (if using the EM default shrinkage)

- Navigate to Settings > Enterprise model > Select an Activity > Select *Forecast targets and defaults* tile.



2. Enter the numbers for discretionary and non-discretionary shrinkage defaults into the spreadsheet.



Settings > Enterprise model > Forecast defaults

Site - Steps to Success

- Home
- Basic properties
- Work habits & hours
- Child or subordinate activities
- Forecast defaults

Enterprise model

- Community Enterprise Model
 - Site 1 - Dallas, TX
 - Customer Program Service
 - Billing
 - Customer Onboard Service
 - New Customer Sales
 - Outbound
 - Tier 1 support
 - Multimedia Sales
 - Sales Chat
 - Sales Email
 - Site 2 - Nashville, TN
 - Help Desk
 - Developer support
 - Tier 2
 - Tier 3
 - Multimedia Support
 - Support Chat
 - Support Email

Site 1 - Dallas, TX
Step 4: Forecast defaults

The selected activity has forecast defaults defined. These values are shown below.

Staffing requirements defaults

Service metric type
Service Level

Service level percent (%)
80

Service level time (seconds)
20

Shrinkage defaults

Discretionary shrinkage percent
10

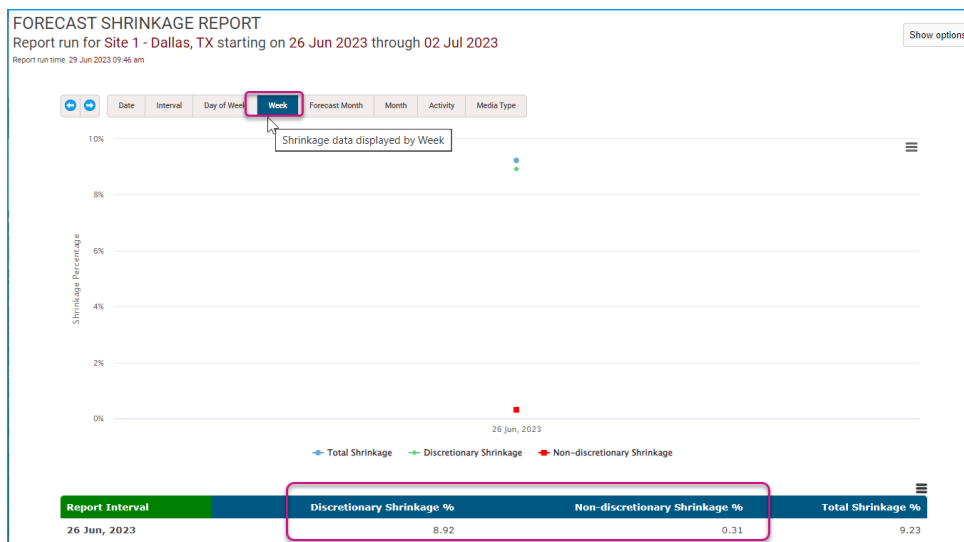
Non-discretionary shrinkage percent
10

Save Delete

Forecast optimizations
Need to fine-tune your forecasts? [Click here to optimize different parts of the forecast for the selected activity.](#)

Shrinkage forecast report (if using a shrinkage forecast profile)

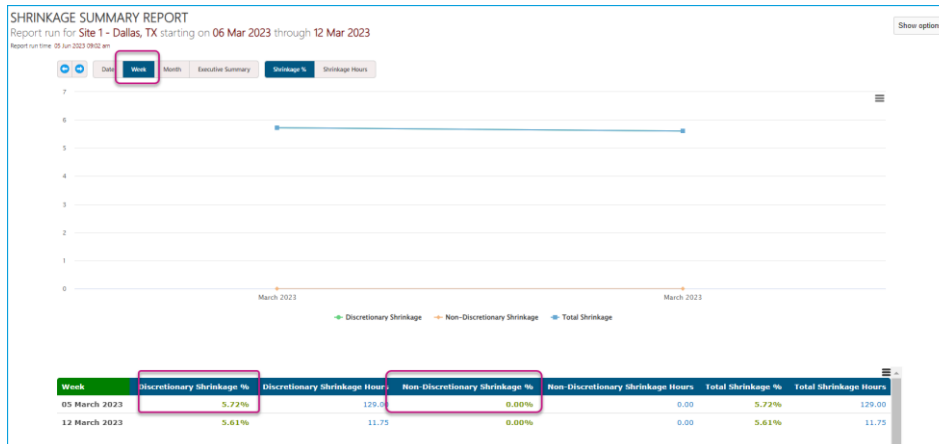
1. Navigate to Report > Published forecast > Shrinkage percentages.
2. Click *Show options*, select an Activity, and enter the date range.
3. Click *Apply options*.
4. Change the filter to Week.
5. Enter the numbers for discretionary and non-discretionary shrinkage into the spreadsheet.





Shrinkage actuals

1. Run a shrinkage report (not a forecast shrinkage report). Go to Report > Published schedule > Shrinkage report.
2. Run it for the same activity and date range.
3. Change the filter to Week and review the discretionary and non-discretionary shrinkage percentages.
4. Enter these numbers into the spreadsheet.



How to use the spreadsheet

Ideally, have a worksheet for each activity.

Date	Normal Week?	Reason for Not Normal	Forecasted Contacts	Actual Contacts	Forecast Variance	Forecasted AHT	Actual AHT	AHT Variance	Forecast Discretionary Shrinkage	Actual Discretionary Shrinkage	Variance Discretionary Shrinkage	Forecast Non-Discretionary Shrinkage	Actual Non-Discretionary Shrinkage	Variance Non-Discretionary Shrinkage	Forecast Total Shrinkage	Actual Total Shrinkage	Variance Total Shrinkage
6/18/2023	No	Marketing: new campaign didn't tell	10212	10460	2.4%	328	338	3.0%	10%	6%	4%	10%	11%	-1%	20%	17%	-3%

Date: Plan to do one week per row.

Normal week? Was it a normal week? Were there any mitigating factors (extra unplanned meetings, an unexpected marketing initiative, a flu epidemic in the contact center)? Be specific so in six months when asked why you didn't meet service level, you'll have the answer.

Forecasted and Actual Contacts, AHT, shrinkage: Enter the data for each column from the reports into the spreadsheet.

Variiances: The formulas in the spreadsheet will calculate the variance for each field.



Evaluating the results

Do this weekly and you will begin to see trends, e.g., is your forecast always off by 10%? Then you can dig deeper to see where the problem is. It could be one skill that is throwing off the whole forecast.

When you do this over time you can start to see seasonality—how your requirements vary due to holidays and the seasons. And will see how much of an adjustment you need to make in your forecasts to account for the differences.

What about agent behavior?

As close as you get in your forecast with defining events, this will not account for agent behavior. Agents may put themselves in a 'not ready' state to use the restroom, take a smoke break, or chat with a teammate and events in the schedule do not account for that behavior.

Look at a historical adherence report, and if you've defined your unscheduled activities as out of adherence, you can take the inverse of your in-queue variance to see the amount of shrinkage due to agent behavior that includes unscheduled time out of queue or out of adherence.

We recommend defining your unscheduled activities (e.g., sick, late, going home early), things that take agents away from your plan based on their behavior, in the event type behavior with the question: *For real-time adherence, should agents be considered logged into queue during events of this type?* Set this question to *Yes* so you can track adherence. This is the predefined setting for Intra-day Exception Event.

?

Late

Step 2: Event type behaviors

Predefined event type classifications
Custom behavior settings

Answer the following questions to determine the behavior of this event type.

Manually select the behavior options for this event type.

		YES	NO
Can this event type be used as a default work type?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does this event occur at work / on site?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is this event type's start time and duration constrained by an agent work type event?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is the scheduled agent logged into a queue during events of this type?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does this event type require supervisor approval?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are agents available for callback into queue during events of this type?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do events of this type travel with agent schedule swaps?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
For real-time adherence, should agents be considered logged into queue during events of this type?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Is this event type available for agent selection in the Agent Self-Service Kiosk?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
If eligible for Agent Self-Service Kiosk, does this require runtime validation?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Save behaviors
Clear selections



Revising your forecast

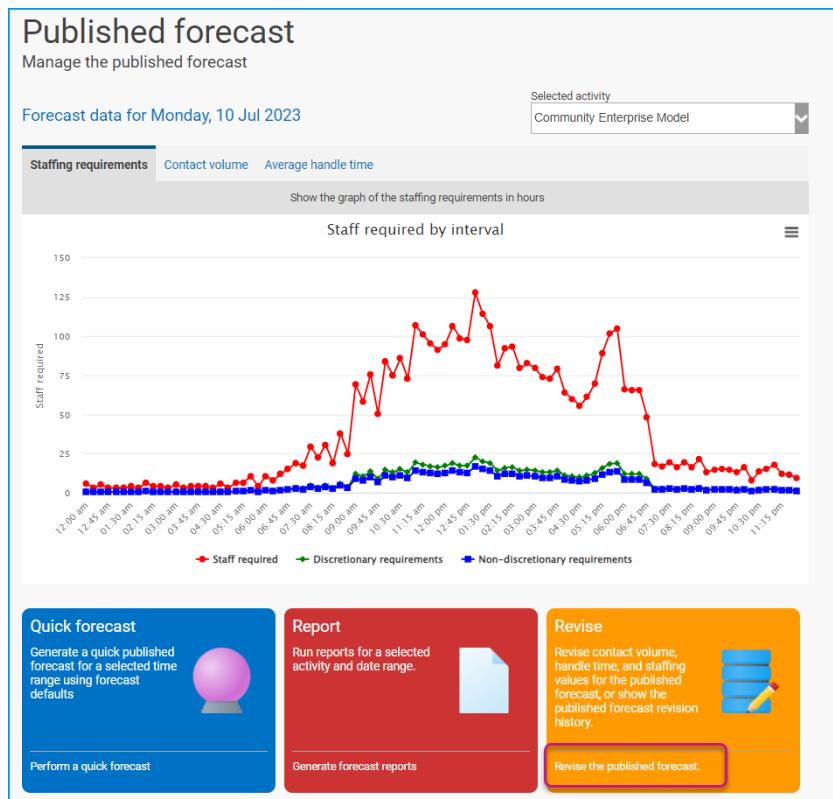
Now that you know where your history didn't quite live up to expectations, how do you update your published forecast for next month? How do you fix your forecast to reflect more accurately what you've learned from examining the history?

Activity level revision

While you could revise a working forecast at the site level then republish it, this is only effective if the change in call volume across all activities is equally up or down. However, if each activity has a variance that is unique, you should revise each activity separately in the published forecast. Revising the published forecast will update the staffing requirements.

Step-by-step

1. Go to Forecast > Published forecast
2. In the Revise tile, click *Revise the published forecast*.










In the Revision options pop-up, select *Revise weekly totals*.

Revision options

Select from the following options to revise the published forecast

-  **Revise specific intervals**
 Revise forecasted contact volume, handle time or staffing requirements for each interval of a selected date.
-  **Revise daily totals**
1 Revise the daily total forecasted contact volume, handle time or staffing requirements for a range of dates.
-  **Revise weekly totals**
7 Revise the weekly total forecasted contact volume, handle time or staffing requirements for a range of dates.
-  **Revise monthly totals**
31 Revise the monthly total forecasted contact volume, handle time or staffing requirements for a range of dates.
-  **Show revision history**
 Show the published forecast revision history report and optionally delete unwanted forecast revisions.

Step 1: Specify revision parameters Select a leaf-node activity and date range and add a comment (required).

1
2
3

Revise published forecast

Step 1: Specify revision parameters

Selected activity

From date

Through date

Time zone

Comments

Required field

Click *Next*.



Step 2: Revise forecast data In the table, for each day enter the adjustment to Contact Volume and/or AHT. Select whether the adjustment is a *Value adjustment* (a number) or a *% adjustment*, with numbers based on your analysis of your data in the spreadsheet.

1
2
3

Revise published forecast

Step 2: Revise forecast data

Contact volume
Average handle time
Staffing requirements

Show the graph of the contact volume

Forecasted contacts by interval

Time interval	Contacts	Adjustment	Adjustment Type	Adjusted	AHT	Adjustment	Adjustment Type	Adjusted	Staff	Adjustment	Adjustment Type	Adjusted
05 Jun 2023	4800	10	% adjustment	5280	399.45		Value adjustment	N/A	973.19		Value adjustment	N/A
12 Jun 2023	4800	-10	% adjustment	4320	399.45		Value adjustment	N/A	973.19		Value adjustment	N/A
19 Jun 2023	4800	5000	Value adjustment	5000	399.45		Value adjustment	N/A	973.19		Value adjustment	N/A
26 Jun 2023	4800		Value adjustment	N/A	399.45		Value adjustment	N/A	973.19		Value adjustment	N/A
03 Jul 2023	4800		Value adjustment	N/A	399.45		Value adjustment	N/A	973.19		Value adjustment	N/A
10 Jul 2023	4800		Value adjustment	N/A	399.45		Value adjustment	N/A	973.19		Value adjustment	N/A

Click *Save*.

Step 3: Finish Review the results then click *Finish*.

1
2
3

Revise published forecast

Step 3: Finish

Success?	Time interval	Notes
✔	05 Jun 2023 - 12 Jun 2023	Successfully revised the published forecast.
✔	12 Jun 2023 - 19 Jun 2023	Successfully revised the published forecast.
✔	19 Jun 2023 - 26 Jun 2023	Successfully revised the published forecast.
✘	26 Jun 2023 - 03 Jul 2023	Nothing to revise in contact volume, handle time or staffing requirements, please verify your input values.
✘	03 Jul 2023 - 10 Jul 2023	Nothing to revise in contact volume, handle time or staffing requirements, please verify your input values.
✘	10 Jul 2023 - 17 Jul 2023	Nothing to revise in contact volume, handle time or staffing requirements, please verify your input values.

Finish