

# **GENESYS**

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# Workforce Management Administrator's Guide

**WFM Server Options** 

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# WFM Server Options

WFM Server is the only WFM component that has both configuration Annex and Options tab settings.

# Options Tab Settings

From the Options tab you can modify the default WFM Server configuration settings. The tab contains nine sections. The options in each of these sections are described below.

## CalendarService Section

#### **AutoPublishTimeOffToSchedule**

Type: Optional Default Value: 0 Valid Values: 0, 1, 2 Dependencies: None

Enables, disables, and configures automatic publishing of granted time off to an agent's existing schedule. The following settings specify WFM's response when an agent requests time off:

- 0—Feature is off.
- 1—Feature is on; a part-day time-off cannot overlap exceptions.
- 2—Feature is on; a part-day time-off deletes overlapped exceptions.

#### **BatchRequest**

Type: Optional Default Value: true Valid Values: true, false Dependencies: None

Specifies how WFM Server processes multiple time-off requests submitted simultaneously by a single agent. When this option is set to true, WFM Server processes these time-off items in one batch. When this option is set to false, WFM Server processes these time-off items one-by-one.

#### **CalendarOverScheduleData**

Type: Optional Default Value: 0 Valid Values: 0, 1, 2, 3 Dependencies: None

Enables the resolution of conflicts between granted or preferred time-off items and schedule data. Previously, when schedule data overlapped calendar data, unscheduled time off items were not considered when WFM Server checked agent time-off limits and balances.

- 0—Disables the resolution functionality (default value).
- 1—Enables resolution between granted calendar time-off items and overlapping schedule data.
- 2—Adds resolution of preferred time-off items to value 1 functionality.
- 3—These requests are counted against an agent's time-off balance and limits:
  - All requests with the status granted/not scheduled.
  - Only wait-listed requests with the status preferred/not scheduled.

#### CarryOverTimeout

Type: Optional Default Value: 1440

Valid Values: Any positive integer (-1 = off)

Dependencies: None

Specifies the time interval (in minutes) between process runs that handle automatic carry-over for Time Off balances.

#### **DetermineFullDayTimeOffStartEndPaidHours**

Type: Optional
Default Value: false
Valid Values: true, false
Dependencies: None

Specifies whether or not WFM Server resolves the Start/End time. If set to true when a user adds a Full-Day Time Off with the Start/End times not specified, WFM Server resolves the Start/End times.

#### MaxAuditReports

Type: Optional Default Value: None

Valid Values: Any positive integer

Dependencies: None

Specifies the number of audit reports that can be built at one time. The recommended value is 1. If you request a greater number than is specified, the additional reports go into a queue.

#### **HideMessagesForNotWorkingAgents**

Type: Optional Default Value: false Valid Value: true, false Dependencies: None

Specifies whether to prevent WFM Web from displaying error messages when Calendar items are set for agents who have been terminated or have not yet been hired, set this value to true. If you want to view error messages when Calendar items are set for agents who have been terminated or have not yet been hired, set this option to false.

# **Important**

This section and option are not included in the template by default. You must create them yourself. See Creating New Configuration Sections and Options for instructions.

#### **PreventTimeOffNoAvailability**

Type: Optional Default Value: 0 Valid Values: 0, 1, 2 Dependencies: None

Specifies whether an additional check is turned on or off for already-configured days of days off when an agent requests time off.

- 0—The option is off.
- 1—Prevents an agent from requesting time off for weekdays, when the agent has no Contract availability.
- 2—Same as described for the value 1, except weekdays when Contract nonavailability is overwritten by
  an open granted availability interval. Also applies to dates with granted no-availability preferences and
  granted day-off preferences and to days when an agent has a rotating day-off according to his or her
  assigned rotating schedule.

#### When this option is on:

- If an agent requests a new time-off that overlaps an existing day-off, that agent receives an error and the time-off is not inserted into the calendar.
- The supervisor receives a warning, which is possible to override.

#### WaitlistTimeout

Type: Optional Default Value: 60

Valid Values: Any positive integer (-1 = off)

Specifies the interval, in minutes, between process runs that handle wait-listed Calendar items.

#### Client Section

#### CfqServerRequestTimeout

Type: Mandatory Default Value: 15

Valid Value: Any positive integer

Dependencies: None

Specifies the number of seconds to wait for a response from Configuration Server before timing out. This key is used when requesting the list of objects from Configuration Server for synchronization purposes. The value should be increased in configurations with a high number of objects or slow network connections.

#### **SOAPTimeout**

Type: Mandatory Default Value: 60

Valid Value: Any positive integer

Dependencies: None

Specifies the number of seconds to wait for the response from WFM Server before timing out.

# ConfigService Section

#### AcceptZeroSkillLevel

Type: Optional Default Value: true Valid Value: true, false Dependencies: None

Specifies whether or not WFM Server can set an agent skill level to 0. When this option is set to true it enables WFM Server to set an agent skill level to 0. When set to false it prevents (disables) WFM Server from setting an agent skill level to 0.

CacheLifespan Type: Optional

Default Value: No default value (null value means the size is unlimited)

Valid Value: Any positive integer

Dependencies: None

Specifies the amount of time, in hours, that data remains in the Configuration cache without being accessed. After this duration, the data is dropped from the cache.

#### CachePreloadTimeout

Type: Optional

Default Value: No default value (null value means 120 minutes)

Valid Value: Any positive integer

Dependencies: None

Specifies the time, in minutes, for preloading data in the cache. Data is preloaded up to the amount specified in the MinCacheSize option.

#### LocalTimezones

Type: Optional Default Value: false Valid Value: true, false Dependencies: None

When this option value is set to true, WFM Server interprets the timezone Daylight Saving Time (DST) settings from Configuration Server in the local time zone time, instead of usual Coordinated Universal Time (UTC). Genesys recommends setting this option value to true, if the timezone DST rules in Configuration Server is configured in local time, instead of the required UTC.

#### MaxCacheSize

Type: Optional

Default Value: No default value Valid Value: Any positive integer

Dependencies: None

Specifies the maximum size, in megabytes (MB), of the Configuration cache.

## MinCacheSize

Type: Optional

Default Value: No default value Valid Value: Any positive integer

Dependencies: None

Specifies the minimum size, in megabytes (MB), of the Configuration cache. The cache is preloaded up to the minimum size.

#### **MSARestrictAccess**

Type: Optional Default Value: false Valid Value: true, false

Changes Take Effect: Immediately

Dependencies: None

Specifies whether or not users can access Multi-Site Activites (MSA). When this option is set to true, users must have access to all Activities under MSA to view any multi-site activity. When set to false users must have access to at least one Activity under MSA to view multi-site activities (current functionality).

#### **SynchronizationCheckUpdatesTimeoutSec**

Type: Optional

Default Value: 60 seconds Valid Value: Any positive integer

Dependencies: None

Specifies the time, in seconds, between checks for changes to Site configuration. When this configuration option value is set to 0, checking is turned off and WFM Server does not check for changes to Site configuration.

#### SynchronizationLevel

Type: Optional Default Value: 2 Valid Value: 0, 1, 2 Dependencies: None

Specifies the level, at which WFM Server performs synchronization. Valid values are:

- 0—Synchronization is off
- 1—Synchronization is on for agents only in Sites that have WFM Server configured with this option set to 1.
- 2—Full synchronization is on, only if (at least one) WFM Server is configured with this options set to 2.

#### **SynchronizationTimeout**

Type: Optional Default Value: 0 Valid Value: 0 - 71582 Dependencies: None

Specifies the time period, during which WFM Server performs full synchronization. This value determines the time period in minutes, after which WFM Server starts full synchronization. If this value is set to 0, WFM Server performs full synchronization on startup. Thereafter, WFM Server performs real-time synchronization only.

The level of synchronization started by the timeout setting depends on the option SynchronizationLevel. Here are some examples:

• SynchronizationLevel = 2

SynchronizationTimeout = 0

WFM Server performs full synchronization on startup. Thereafter, WFM Server performs real-time synchronization only.

• SynchronizationLevel = 1

SynchronizationTimeout = 300

WFM Server performs full synchronization (except time zones and skills) on startup and then, full synchronization (except time zones and skills) every 5 hours. In between full synchronizations, WFM Server performs real-time synchronization (except time zones and skills).

SynchronizationLevel = 0SynchronizationTimeout = 300

WFM Server does not perform synchronization. The SynchronizationTimeout option is ignored, in this case.

#### **ETL Section**

#### **DaysAhead**

Type: Optional

Default Value: 14 days

Valid Values: Any integer between 1 and 365

Dependencies: None

Specifies the number of days in the future from current date to track Fact data.

#### DaysBack

Type: Optional

Default Value: 14 days

Valid Values: Any integer between 0 and 365

Dependencies: None

Specifies the number of days in the past from current date to track Fact data.

#### **DayChunk**

Type: Optional Default Value: 7 days

Valid Values: Any integer between 1 and 31

Dependencies: Should be less than (DaysBack + DaysAhead)

Specifies the number of days that will be processed at a time. The tracked day range is defined by the values set in the DaysBack and DaysAhead parameters and is processed in the specified chunks of data. So, this parameter determines the size of transaction. Larger transactions require more memory and other resources, but can be processed faster.

#### **ETLTimeout**

Type: Optional

Default Value: 180 minutes

Valid Values: Any integer between 0 and 2880

Dependencies: None

Specifies the timeout interval (in minutes) between each execution of the ETL process. Negative or zero values disable the ETL process.

#### ForecastService Section

#### **ForecastTimestep**

Type: Optional Default Value: 15

Valid Values: 15, 30, 60 (Expert Average Engine) OR 15, 60 (Universal Modeling Engine)

Dependencies: None

Specifies the step used in the Expert Average. If the step is 60, then all values (that is, four values, each representing a 15-minute timestep value) in the 60-minute interval will be filled with the same predicted value.

#### MaxScenarioCacheSize

Type: Optional

Default Value: No default value (null value means the size is unlimited)

Valid Value: Any positive integer

Dependencies: None

Specifies the maximum size of the Forecast Scenario cache expressed in megabytes (MB).

#### ServiceLevelMethod

Type: Optional Default Value: 0 Valid Value: 0, 1 Dependencies: None

Specifies whether Service Level should be calculated from the number of interactions distributed (as in Workforce Management 6.5) or from the number of interactions offered, taking into account abandoned interactions. The default value, 0, indicates that Service Level is calculated, based on the number of interactions distributed. To include abandoned interactions, set the value to 1.

This option is not included in the template by default. You must create it yourself. Create this option if you want to include abandoned interactions (value set to 1). If you do not create this option, WFM functions as though you have set the value to 0. See Creating New Configuration Sections and Options for instructions.

## **Identity Section**

#### **ApplicationType**

Type: Optional in a Framework 8.x environment.

Default Value: WFMServer Valid Value: WFMServer Dependencies: None

Specifies which Workforce Management component this application is for. Configure this option only if you are using an application of the type ThirdPartyServer.

# Log Section

#### verbose

Type: Mandatory Default Value: all Valid Values: all, trace, standard, none, yes (= all), no (= none)

Dependencies: None

Filters the output of log messages, based on their assigned priority.

- all—Enables output of all messages to the log file
- · Trace—Enables informational and error messages and disables debug messages
- Standard—Enables error messages only and disables informational and debug messages
- · None—Disables all messages.

#### buffering

Type: Mandatory Default Value: false Valid Values: true, false Dependencies: None

Specifies whether system file buffering is turned on (true) or off (false).

#### segment

Type: Mandatory Default Value: false

Valid Values: false, <number>, <number>KB, <number>MB, <number>Hr

Dependencies: None

Sets the maximum size (in KB, MB, or hours) of the log file segment, after which a new segment is created. The default size is in KB. The number (<number>) cannot be less than 100 KB or less than one hour. A value of No indicates no segmentation of the log file.

#### expire

Type: Mandatory Default Value: false

Valid Values: false, <number>, <number> file, <number> day

Dependencies: None

Sets the expiration mode for old segments. The number to be stored cannot be less than 1 file or 1 day or more than 100 files or 100 days. A value of No indicates that files do not expire.

#### messagefile

Type: Mandatory

Default Value: wfmserver.lms Valid Value: wfmserver.lms

Dependencies: None

Specifies the name of the file that stores application-specific log messages. The only valid value is wfmserver.lms.

#### standard

Type: Mandatory Default Value: stdout

Valid Values: log output types, such as stdout, stderr, syslog, network, <filename>

Dependencies: None

Specifies that log events of the Standard level are to be sent to the listed outputs. For centralized

logging, use a value of network. You can use a local file name as the value, stdout, or network.

#### trace

Type: Mandatory Default Value: stdout

Valid Values: log output types, such as stdout, stderr, syslog, network, <filename>

Dependencies: None

Specifies that log events of the Trace level are to be sent to the listed outputs. For centralized logging, use network. You can use a local file name as the value, stdout, or network.

#### debug

Type: Mandatory Default Value: stdout

Valid Values: log output types, such as stdout, stderr, syslog, network, <filename>

Dependencies: None

Specifies that log events of the Debug level are to be sent to the listed outputs.

# Warning

Do not use the value network unless requested by Genesys Professional Services because it generates extremely heavy message loads that can degrade system performance.

#### all

Type: Mandatory Default Value: stdout

Valid Values: log output types, such as stdout, stderr, syslog, network, <filename>

Dependencies: None

Specifies that log events of all levels, Standard, Trace, and Debug, are to be sent to the listed outputs.

# Warning

Do not use the value network unless requested by Genesys Professional Services because it generates extremely heavy message loads that can degrade system performance.

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PerformanceService Section

#### **MaxActivityDays**

Type: Optional Default Value: 25,000

Valid Value: Any positive integer

Dependencies: None

Controls the maximum cost of performance-related and forecast-related data that can be returned by WFM Server. It prevents very large requests from overloading WFM Server. The value represents Activity Days. For example, a request for 50 activities over a 31-day period would require 1550 Activity Days.

If the request requirement exceeds the MaxActivityDays option limit, then the server returns this message:

Specified date range is too long for selected target. Please select different target or a shorter date range.

The default value is based on a typical customer configuration. You might need to adjust it, depending on your installed hardware, user work pattern, or if the server is too slow or short of memory when handling certain requests.

#### **NoCallsServiceLevel**

Type: Optional Default Value: 0 Valid Values: 0, 100 Dependencies: None

Specifies whether the Performance window shows service level as 0% or 100% when there are no incoming interactions.

# **Important**

This section and option are not included in the template by default. You must create them yourself. See <u>Creating New Sections and Options</u> for instructions.

## RecalculateForecastStaffing

Valid Value: boolean (yes, no, true, false, y, n, 0, 1)

Default Value: false

Specifies whether or not WFM Server recalculates deferred activity forecasted staffing. When this option is set to true, Server recalculates deferred activity forecasted staffing, based on the schedule, if there is one. When set to false, staffing is returned as saved in the WFM database.

#### ScheduleService Section

#### MaxAuditReports

Type: Optional Default Value: None

Valid Values: Any positive integer

Dependencies: None

Specifies how many audit reports can be built at one time. The recommended value for this option is 1. If you request a greater number than is specified, the additional reports go into a queue.

#### **SplitCoverage**

Type: Optional

Default Value: true or 1

Valid Values: true or 1, false or 0

Dependencies: SplitMode and SplitMS options

Specifies whether schedule coverage should be reported in fractional units in views and reports which include this metric. The possible values are:

- false—Split coverage is not reported in fractional units, and the SplitMode option is ignored. For example, the agent is covering one activity per timestep.
- true—Split coverage is reported in fractional units, and the SplitMode option is applied. For example, if an agent is scheduled to cover three activities during a 15-minute interval, he will count 0.33 toward the coverage of each activity. The agent's split coverage might not be always 0.33. It could be 0.2, 0.8, or any other percentage, depending on the forecast staffing requirement, but the sum is always equal to 1 for the 15-minute timestep.

#### **SplitMode**

Type: Optional Default Value: 0 Valid Values: 0, 1, 2

Dependencies: SplitCoverage and SplitMS options

This option becomes affective only when the SplitCoverage option is set to true. The three possible values and their characteristics are as follows:

• 0—The coverage split is calculated when the schedule is built or modified, and is stored along with the schedule. This means that the coverage split does not change if you change the activity forecast staffing requirement after the schedule is built. (You would have to rebuild the schedule to have any effect on the coverage split.) Fractional coverage is not available for legacy schedules.

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The term *legacy schedule* refers to a schedule that was built with an older version of WFM in which split coverage was not yet implemented.

- 1—The coverage split is calculated when the schedule is built, and is stored along with the schedule. This setting is similar to SplitMode = 0. However, if you have a legacy schedule or a schedule created with SplitCoverage = false, there is no coverage split stored within the schedule. The fractional coverage is recalculated dynamically for that schedule only.
- 2—The coverage split is always calculated dynamically for all new and legacy schedules. If you change the activity forecast staffing requirement after the schedule is built, the coverage split is adjusted dynamically. This

mode should not be used in production environments unless it is suggested by Genesys, because it could have severe performance impact on WFM Server operations

# **Important**

Genesys recommends you set the SplitMode option value to 0 in most environments (in which there are no legacy schedules that require editing with split coverage considerations)

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#### **SplitMS**

Type: Optional Default Value: false Valid Values: true, false

Dependencies: SplitMode and SplitCoverage. If SplitCoverage is false, then SplitMS is ignored.

Enables and disables multi-skill splitting of schedule coverage. When this option value is set to true in the WFM Web Application, the coverage split is dynamically adjusted to maximize multi-skill performance gain. It works on top of the obtained coverage, based on either of these option settings: SplitMode = 0 or SplitMode = 2.

#### **AutoCleanupTimeout**

Type: Optional

Default Value: 0 (disabled)

Valid Values: Any positive integer (minutes) or 0 (zero) (default; disables the option)

Dependencies: None

Enables WFM Server to perform automatic schedule cleanup for terminated agents, and specifies the time interval, in minutes, at which it does this. For example, setting the value to 60 specifies that WFM Server automatically cleans up the schedules of terminated agents every 60 minutes. Setting the value to 0 disables automatic schedule cleanup by WFM Server.

#### Special Handling for Terminated Agents

- The schedules of terminated agents will be deleted from the Master Schedule only for dates that occur on or after the agents' termination dates.
- Each running WFM Server cleans up terminated agent schedules only for those sites that are assigned to this particular server in the Organization > Sites > Properties section of WFM Web. If the server has no specific sites assigned to it, it will clean up all sites when automatic cleanup is enabled.

#### MaxCacheSize

Type: Optional

Default Value: No default value Valid Value: Any positive integer

Dependencies: None

Specifies the maximum size, in megabytes (MB), of the Schedule cache.

#### MinCacheSize

Type: Optional

Default Value: No default value Valid Value: Any positive integer

Dependencies: None

Specifies the minimum size, in megabytes (MB), of the Schedule cache. The cache is preloaded up to the minimum size.

#### **MaxScenarioCacheSize**

Type: Optional

Default Value: No default value Valid Value: Any positive integer

Dependencies: None

Specifies the maximum size, in megabytes (MB), of the Schedule Scenario cache.

#### CachePreloadDayChunks

Type: Optional

Default Value: No default value (null value means 14 days)

Valid Value: Any positive integer Dependencies: MinCacheSize

Specifies the chunk of days to load when performing a schedule cache preload.

#### CachePreloadMaxDays

Type: Optional

Default Value: No default value (null value means 365 days)

Valid Value: Any positive integer Dependencies: MinCacheSize

Specifies the number of days to preload starting from the current date. The preload stops if the MinCacheSize is reached.

#### CachePreloadTimeout

Type: Optional

Default Value: No default value (null value means 180 minutes)

Valid Value: Any positive integer

Dependencies: None

Specifies the time, in minutes, for preloading data in the cache. Data is preloaded up to the amount specified in MinCacheSize.

#### CacheLifespan

Type: Optional

Default Value: No default value (null value means the size is unlimited)

Valid Value: Any positive integer

Dependencies: None

Specifies the amount of time, in hours, that data remains in the Schedule cache without being accessed. After this duration, the data is dropped from the cache.

#### Server Section

#### **MaxThreadPoolSize**

Type: Mandatory Default Value: 80

Valid Value: Any positive integer

Dependencies: None

Specifies the maximum number of threads in the thread pool.

#### **MinThreadPoolSize**

Type: Mandatory Default Value: 8

Valid Value: Any positive integer

Dependencies: None

Specifies the minimum number of threads in the thread pool.

#### **Proxy**

Type: Optional

Default Value: No default value

Dependencies: None

Specifies a proxy server.

#### **SessionTimeout**

Type: Mandatory Default Value: 10

Valid Value: Any positive integer

Dependencies: None

Specifies the timeout, in minutes, for any client session with this WFM Server.

#### **ThreadPoolDownsizeTimeout**

Type: Mandatory

Default Value: 15m (minutes) Valid Value: Any positive integer.

Dependencies: None

Specifies how long a thread stays idle before it is removed from the thread pool. Follow the number with s (seconds) or m (minutes). By default, the value is in minutes.

#### **ThreadPoolUpsizeTimeout**

Type: Mandatory

Default Value: 10s (seconds) Valid Value: Any positive integer

Dependencies: None

Specifies how long a request stays in queue before the thread pool size is increased. Follow the number with s (seconds) or m (minutes). By default, the value is in seconds.

# VirtualDirectory

Type: Not applicable

Default Value: No default value Valid Value: Not applicable Dependencies: None

For future use.

# Annex Tab Settings

From the Annex tab you can modify the default WFM Server configuration settings. The tab contains one sections. The options in each of these sections are described below.

## security Section

#### require-authentication

Type: Optional Default Value: true Valid Value: true, false Dependencies: None

Specifies whether authentication is (or is not) required for third-party connections to WFM Server. The default value true is in effect if this option is not defined.

# **Important**

Prior to release 8.1, the WFM API allowed third-party clients to connect to WFM using the system account without authentication. Now, this behavior is disabled by default and all third-party connections require proper user/password authentication.