AVAYA

Avaya Business Advocate

Release 3.1
User Guide

Avaya Business Advocate
User Guide

Contents

Preface

This section contains the following topics:

Purpose

The purpose of this document is to provide a general understanding of how Avaya Business Advocate (BA) can be used for call and agent selection.

Audience

This document is written for:

- Contact center managers
- Contact center administrators
- Contact center supervisors

Reasons for reissue

This document has been reissued because the maximum range for Dynamic Threshold was incorrect in the previous issue. The range should be 0% to 200% of the administered value.

Related documents

You might find the following Avaya documentation useful. This section includes the following topics:

- <u>Communication Manager administration documents</u> on page 10
- <u>Call Center documents</u> on page 11
- <u>Documentation Web sites</u> on page 11

Communication Manager administration documents

The primary audience for these documents consists of Communication Manager administrators who work for external customers and for Avaya's dealers. The satisfaction and needs of our external customers is the primary focus for the documentation.

- *Administrator Guide for Avaya Communication Manager* - Provides complete step-by-step procedures for administering the communication server, plus feature descriptions and reference information for administration screens and commands.

- *Avaya Communication Manager ASAI Technical Reference* - Provides detailed information regarding the Adjunct/Switch Application Interface (ASAI). Written for application designers responsible for building and programming custom applications and features.

- *Avaya Communication Manager Basic Administration Quick Reference* - Provides step-by-step procedures for performing basic communication server administration tasks. Includes managing phones, managing features, and routing outgoing calls.

- *Avaya Communication Manager Advanced Administration Quick Reference* - Provides step-by-step procedures for adding trunks, adding hunt groups, writing vectors and recording announcements.

- *Avaya Communication Manager Basic Diagnostics Quick Reference* - Provides step-by-step procedures for baselining your system, solving common problems, reading alarms and errors, using features to troubleshoot your system, and contacting Avaya.

- *Feature Description and Implementation for Avaya Communication Manager*- Provides feature descriptions and some implementation guidance for Avaya Communication Manager.

- *Hardware Description and Reference for Avaya Communication Manager* - Provides hardware descriptions, system parameters, lists of hardware required to use features, system configurations, and environmental requirements.

- *Overview for Avaya Communication Manager* - Provides a brief description of Avaya communication server features.

- *Reports for Avaya Communication Manager* - Provides detailed descriptions of the measurement, status, security, and recent change history reports available in the system and is intended for administrators who validate traffic reports and evaluate system performance. Includes corrective actions for potential problems.

Call Center documents

These documents are issued for Avaya Call Center applications. The intended audience is Call Center administrators.

- *Avaya Call Center Change Description* - Provides a high-level overview of the new features available for the most current release.

- *Avaya Call Center Call Vectoring and EAS Guide* - Provides information on how to write, use, and troubleshoot vectors, which are command sequences that process telephone calls in an Automatic Call Distribution (ACD) environment.

- *Avaya Call Center Automatic Call Distribution (ACD) Guide* - Provides feature descriptions and some implementation guidance for call center features.

- *Avaya Communication Manager Call Center Software - Basic Call Management System (BCMS) Operations* - Provides information on the use of the BCMS feature for ACD reporting.

Documentation Web sites

For product documentation for all Avaya products and related documentation, go to http://www.avayadocs.com. Additional information about new software or hardware updates will be contained in future issues of this book. New issues of this book will be placed on the Web site when available.

Use the following Web sites to view related support documentation:

- Information about Avaya products and service
  http://www.avaya.com
- Sun hardware documentation
  http://docs.sun.com
- Okidata printer documentation
  http://www.okidata.com
- Informix documentation
  http://www.informix.com
- Tivoli Storage Manager documentation
  http://www.tivoli.com

Availability

Copies of this document are available from one or both of the following sources:

Note:
Although there is no charge to download documents through the Avaya Web site, documents ordered from the Avaya Publications Center must be purchased.

● The Avaya online support Web site, http://support.avaya.com

● The Avaya Publications Center, which you can contact by:

Voice:

+1-207-866-6701

+1-800-457-1764 (Toll-free, U.S. and Canada only)

Fax:

+1-207-626-7269

+1-800-457-1764 (Toll-free, U.S. and Canada only)

Mail:

GlobalWare Solutions

200 Ward Hill Avenue

Haverhill, MA 01835 USA

Attention: Avaya Account Manager

E-mail:

totalware@gwsmail.com

Overview of Business Advocate

This section provides an overview of how Business Advocate can be used to help meet the goals of your contact center.

This section includes the following topics:

Overview

This section includes the following topics:

- The importance of contact centers on page 14
- Why Avaya Business Advocate? on page 14
- Traditional contact centers versus Business Advocate contact centers on page 15
- Matching your needs with Business Advocate solutions on page 15

The importance of contact centers

Contact centers have long been recognized as the front line in sales and customer service, and have more recently been acknowledged in customer relationship management. Without contact centers, businesses would reach fewer customers and fewer markets, resulting in lower sales and loss of customer loyalty. Lost opportunities would go instead to companies that cater to customer demand for information, convenience, and choice.

As contact centers have become more strategic to business success, more demands have been placed them. Often these demands require the center to segment callers to handle some calls differently from others. This allows the business to meet different caller expectations, entitlements, needs, or opportunities. The ability to effectively meet these differences can result in greater customer acquisition, higher sales, better customer retention, and higher profitability.

While customer segmentation can provide a greater opportunity for effectiveness, it also creates challenges in a traditional contact center that make it difficult for contact center managers to manage costs effectively while meeting the goals of the business.

Why Avaya Business Advocate?

Business Advocate has predictive components that determine how long customers will wait based on the call-handling decisions for any available agent. Business Advocate considers such questions as:

- If one call is taken, how long will the other call wait until another agent is available to take it?
- Which call benefits the most by being served now, and which suffers the most by being forced to wait?

Traditional contact centers versus Business Advocate contact centers

Traditional contact centers often lack flexible methods for meeting their goals. Business Advocate, on the other hand, allows the contact center's goals to be incorporated into every decision to help keep service at the right level for each type of call. For example, a traditional contact center can prioritize its "Premier" customers over its "Good" customers through the use of queue priorities. If, however, a Good customer has waited several minutes, should a newly arriving Premier call be given priority over the waiting call? In this example, Business Advocate could provide Premier customers with a better level of service than Good customers, without creating the problems that lower-priority calls often experience.

A traditional contact center often multiqueues or overflows calls to back-up groups to try to meet service level goals. This often results in groups exchanging work and agents spending more time in their back-up roles than in their primary roles. Customer satisfaction, revenue, and even productivity can be affected. Business Advocate not only detects when a skill needs the extra help of back-up agents, it also detects the need before customer wait time has risen too high. Business Advocate automates the activation of back-up agents and returns them to their primary roles when problems are resolved. As a result, centers using Business Advocate no longer need to dedicate managers to monitoring performance and intervening by moving calls or rearranging agents. By spending less time on manual intervention, managers can turn their attention to coaching, planning, or other meaningful management work.

Business Advocate also provides benefits for agents. Business Advocate can distribute calls in a way that promotes fairness among agents. It also provides the ability to deliver a specific mixture of calls to agents to provide a more equitable opportunity for compensation.

If your contact center is facing operational challenges that are keeping it from becoming the strategic asset that your business needs, Business Advocate can help you break through the barriers.

Matching your needs with Business Advocate solutions

Here are just a few ways that you can use Business Advocate to meet your business needs:

- Use the Service Objective feature to give the right level of service to each skill. This feature will help you to align service with customer expectations and maximize revenue opportunities.

- Activate the Dynamic Queue Position option to segment customers according to customer value, entitlement, or expectations, without increasing the number of skills in the contact center. This feature allows you to define service levels at the Vector Directory Number (VDN) level and route the calls from several VDNs to a single skill.

● Maintain percent in service level targets for skills by activating reserve agents earlier or later. The Dynamic Threshhold Adjustment feature automatically adjusts the thresholds that control the activation of reserve agents.

● Establish allocation targets for how much time each agent should spend in each skill. Use the Dynamic Percentage Adjustment option to automatically shift allocations as needed to meet percent in service level targets as contact center conditions change.

● Use the Auto Reserve Agents feature to intentionally leave an agent idle, even if a call is waiting, if her time in that skill is over target. This allows you to make agent resources available for other skills.

● Eliminate "hot seats" and distribute calls more fairly across the agents in a center by using:

   - The familiar Least Occupied Agent (LOA) method for call selection. This will make total workloads as fair as possible.

   - The familiar Reserve agents capability of Service Level Supervisor to move very busy agents out of some skills full-time and into reserve capacity, generally reducing their work loads.

   - The enhanced Percent Allocation methods to give each agent a fair portion of each type of skill, in cases where agent compensation or rewards are tied to contribution at the skill level.

Introduction to Business Advocate

This section includes the following topics:

What is Business Advocate?

Business Advocate addresses these questions:

What should this agent do next? - Business Advocate answers this question each time an agent becomes available and calls are waiting in queue. The term "should" is used deliberately because it implies a consideration of trade-offs in the decision. With Business Advocate, the answer to this question does not come from executing a set of preprogrammed directives such as "take the highest priority, oldest waiting call." Such a fixed plan does not consider consequences. Business Advocate, on the other hand, understands the consequences of the decisions it makes and the business objectives for each type of call.

Which agent should take this call? - Business Advocate answers this question when a call arrives and there are available agents waiting for calls. Business Advocate can make this decision so that workloads are distributed fairly across agents, to eliminate *hot seats*. Business Advocate can also promote fairer opportunities for compensation by delivering a certain predetermined mix of calls to agents.

Does the center need to adjust its operations to bring performance back to the wanted level? - Business Advocate continuously evaluates the contact center's performance to determine what the center needs to adjust to bring performance back to the wanted level. Business Advocate responds, down to the levels of an individual caller, when it detects that agent resources should be used differently to prevent a caller's wait times from being too high or to accomplish service level goals more consistently.

Business Advocate agent licensing

Expert Agent ACD agents that use Business Advocate features and capabilities must be given a right-to-use license using a maximum logged-in advocate RFA license material code. The RFA license material code defines how many Business Advocate agents can be logged into the Avaya Communication Manager Contact Center at the same time. The number of Business Advocate agents who can log in is a subset of the total number of ACD agents. A Business Advocate agent is counted as both an ACD agent, or *Logged-In ACD Agent*, and as a Business Advocate agent, or *Logged-In Advocate Agent*. Therefore, the license for the maximum number of *Logged-in Advocate Agents* must be less than or equal to the license for the maximum number of *Logged-in ACD Agents*.

When an agent logs in, the *Logged-In Advocate Agents* license setting is counted only if *any* of the following fields are set as described in the table.

Form	Field	Set to
Login ID for the agent	**Service Objective**	**y**
	Call Handling Preference	**percent-allocation**
	Reserve Level	**1** or **2**
hunt group for the skill the agent logs into	**Service Level Supervisor**	**y**
	Group Type	**pad**
	Dynamic Queue Position	**y**

The **Service Objective** field setting on the **hunt group** form is not used for Business Advocate agent counting. Only agents whose **Login ID** form have the **Service Objective** field set to **y** are counted. Skills with Least Occupied Agent assignments of type ucd-loa or ead-loa are *not* counted as Business Advocate agent types starting with Communication Manager Release 9.

Business Advocate methods versus traditional methods

Business Advocate generally discards many traditional contact center practices. For instance, queue priorities are discarded in favor of the more adaptive service objectives. The simple time-in-queue measurement is discarded in favor of the more consequential view of wait time, known as Predicted Wait Time. Multi-queuing, overflowing, and manual movement of agents and calls are replaced with the use of reserve agents when the need is detected.

Combining methods to achieve wanted results

Based on the needs and challenges of your contact center, you determine which combination of call and agent selection will give you the best results and administer those methods on the switch. See Administering Business Advocate on Communication Manager on page 79 for information about these decisions and procedures for administration.

Note:
Business Advocate requires Expert Agent Selection (EAS) on the DEFINITY Enterprise Communications (ECS) Server Release 6 and later switch.

Call and agent selection

This section includes the following topics:

- Call selection on page 19
- Agent selection on page 19

Call selection

Call selection methods are used when calls are in queue and an agent becomes available. This is known as a call surplus condition. During such conditions, the switch considers the call selection method that is administered for the agent on the Agent LoginID Form to determine which skill to serve. Once a skill is identified, the call at the head of that queue is selected and delivered to the agent. Call selection is based on such things as call handling preference, call selection measurement, and the use of service objectives. See Selecting calls on page 21 for more information on how call selection works.

Agent selection

Agent selection methods are used when there are one or more available agents for an incoming call. This is known as an agent surplus condition. Agent selection methods are administered as a hunt group type for the skill. Business Advocate allows you to select agents according to occupancy, idleness, individual skill level, and the percentage of time that you want the agent to spend serving each skill. See Selecting agents on page 32 for more information on how agent selection works.

Automated agent staffing adjustments

Business Advocate provides you with options that automate staffing during contact center operation. These methods simplify contact center management and eliminate the need for moving agents from skill to skill to ensure coverage as call conditions change.

Business Advocate offers you the ability to assign reserve agents and set overload thresholds to determine when those reserve agents will be engaged. The Dynamic Advocate feature, known as Dynamic Threshold Adjustment, takes this a step further by automatically adjusting the thresholds as needed to help maintain the service levels you defined.

The Dynamic Percentage Adjustment feature, gives you the ability to automate adjustments to predefined allocations for your agents' time to maintain defined service levels. The Auto Reserve Agents feature allows you to intentionally leave an agent idle in a skill when the agent's adjusted work time has exceeded the percentage that you administered for that skill.

Selecting calls

This section explains how Business Advocate selects calls for an agent and provides examples of call selection methods.

This section includes the following topics:

How call selection works

When calls are in queue and an agent becomes available, the switch considers the call selection method that is administered for the agent to determine which skill to serve. These methods are administered as call handling preferences on the Agent LoginID form and they include Greatest Need, Skill Level, and Percent Allocation. Each of these methods is discussed later in this chapter. Once a skill is identified, the call at the head of that queue is selected and delivered to the agent.

This section includes the following topics:

Considerations for call selection

Business Advocate call selection methods take into account more than just traditional issues such as wait time and queue priority. They include:

- Eventual caller wait time
- Your service goals
- Using each agent for maximum benefit

How calls are selected for an agent

When calls are in queue and an agent becomes available, the switch quickly reviews pertinent information to determine which skill to select for the agent. When the skill is selected, the call from the head of the queue is delivered to the agent. The information reviewed by the switch includes:

- What call selection method is administered?
- Is Service Objective activated for call selection?
- What are the eligible skill levels or reserve levels of the agent?
- Is the skill in an overload threshold state? If so, which threshold is exceeded, Level 1 or Level 2?
- Is Current Wait Time or Predicted Wait Time selected as the call selection measurement?
- What is the administered queue priority for the calls in queue?
- Is Call Selection Override activated?

Related topics

For more information, see:

- Call selection methods on page 23
- Service Objective on page 24
- Call Selection Override on page 25
- Reserve agents on page 39

Call selection measurement

When implementing your Business Advocate solution, you must choose a call selection measurement that applies across all skills. See Administering Business Advocate on Communication Manager on page 79 for administration procedures.

This section includes the following topics:

- Current Wait Time on page 22
- Predicted Wait Time on page 23

Current Wait Time

Current Wait Time (CWT) is the length of time a call has been in queue. This is commonly known as the Oldest Call Waiting or time in queue.

Predicted Wait Time

Predicted Wait Time (PWT) calculates how long a call waits if the currently available agent does not take the call. This method is recommended because it results in fewer calls with exceedingly long wait times and it can optimize critical agent resources. For example:

A call is queued for a specialized skill for which only a few agents are staffed. Although this call has been waiting in queue for only 10 seconds, PWT estimates that the call will wait an additional 40 seconds because of the small number of agents who are assigned to the skill. Another call is queued for a general skill that is staffed by many agents. This call has been waiting for 20 seconds, but PWT estimates that it will wait in queue for only 5 more seconds. The agent who becomes available is able to serve both the specialized and the general skill. PWT selects the call for the specialized skill first, because its overall predicted wait time is 50 seconds. The other call continues to wait in queue because its total PWT is only 25 seconds.

Call selection methods

This section includes the following topics:

Greatest Need

Greatest Need is a call selection method that selects a skill for an agent to serve based on the call at the highest priority whose Predicted Wait Time (PWT) or Current Wait Time (CWT) for a skill is the longest or whose PWT or CWT is the highest relative to the administered service objective. This method allows you to improve efficiency by lowering the average speed of answer for calls and lowering the maximum delay. See Administering Greatest Need on page 93 for procedures on setting up Greatest Need as a call selection method.

Skill Level

Skill Level is a call selection method that selects calls according to the expertise of an agent in one or more skills. Skill Level selects a call for an agent based first on highest skill level, then highest priority, and finally on CWT or PWT. You assign a preference level of 1 to 16 to each of an agent's skills to determine how you want each agent's time to be spent serving your customers. Level 1 is the highest preference. You may determine, for example, that an agent who is especially good at generating sales should be at a level 1 for the Sales skill, but at a level 4 for handling calls on the Complaints skill. This method can help you to improve your customer service by delivering calls to the most qualified agents.

See Administering Skill Level on page 94 for procedures on setting up Skill Level as a call selection method.

Percent Allocation

Percent Allocation allows you to assign a percentage of an agent's time to each of that agent's assigned skills, to total 100% of the agent's staffed time. Using this method, calls are selected according to the preassigned percentage allocation plan of the agent. Percentage Allocation may assist with agent scheduling so that a percentage of an agent's time can be dedicated to each of the agent's skills. If you have an agent who is equally qualified to serve two skills, for example, you could allocate 50% of that agent's time for each skill. Or, if you have an agent who is most proficient at sales, you might allocate 75% of his time to the sales skill and 25% to the service skill.

The Percent Allocation call selection method is intended to be used with the Percent Allocation Distribution (PAD) agent selection method. Using both helps you to control agents' time in skills under both agent surplus and call surplus conditions. Percent Allocation for call selection is most effective when used with PAD, but can also be used with Universal Call Distribution - Least Occupied Agent (UCD-LOA) or Expert Agent Distribution - Least Occupied Agent (EAD-LOA). For best results, if you administer Percent Allocation for an agent, you should administer PAD for all of that agent's skills. Conversely, if you administer PAD for an agent's skills, you should administer Percent Allocation as the call selection method.

For more information, see:

- Administering Percent Allocation for call and agent selection on page 95 for procedures on administering Percent Allocation
- Reserve agents and Location Preference Distribution on page 111 for information about how Percent Allocation works with Local Preference Distribution.
- Percent Allocation on page 112 for information about other feature interactions.

Service Objective

Service Objective can be used in conjunction with the Greatest Need and Skill Level call handling preferences. It allows you to assign different levels of service to different skills. With this feature, you can assign a more aggressive service objective for a skill that is more important to your contact center. For example, you could assign a service objective of 20 seconds for a premier customer skill and 45 seconds for a regular customer skill. This ensures that premier callers receive a higher level of service. When Service Objective is administered on the Hunt Group form and on the Agent LoginID form, the switch selects calls for agents according to the ratio of Predicted Wait Time (PWT) or Current Wait Time (CWT) and the administered service objective for the skill. The ratio used is either Current Wait Time/Service Objective (CWT/SO) or Predicted Wait Time/Service Objective (PWT/SO).

You can also use Service Objective to create the same level of service for all skills if you set all of the service objectives the same and set all agents to use Service Objective in call selection. Later, if you want to make adjustments for faster or slower service, you can easily change the service objective for the one skill. See Administering Service Objective on page 98 for procedures on activating Service Objective.

> **Note:**
> Service Objective cannot be used with Percent Allocation.

Call Selection Override

This section includes the following topics:

- What is Call Selection Override? on page 25
- How does Call Selection Override work? on page 25
- Call Selection Override example on page 26

What is Call Selection Override?

Call Selection Override is an option with Service Level Supervisor that alters how calls are selected when overload thresholds are exceeded for one or more of an agent's skills. Calls are selected from skills that are over threshold to the exclusion of calls from skills that are under threshold. This feature, when activated, is helpful for contact centers that have one or more skills that are critical in nature, for example, those involving emergency-related calls.

Call Selection Override is activated (set to y) at the system level and must also be administered individually for each skill for which you want to use the feature. See Administering Service Level Supervisor on page 103 for procedures on administering this feature.

How does Call Selection Override work?

If Call Selection Override is activated, call selection is limited to only those skills that are over the highest level threshold. If Call Selection Override is off, normal call selection applies. If two or more calls exceed the same threshold, for example, in a level 2 threshold, the call is selected according to the ratio of PWT or CWT and the threshold for the skill. See What happens when a skill goes over threshold on page 40 for more information about thresholds.

Call Selection Override example

The table below shows that calls are waiting in three of an agent's assigned skills. All calls have been queued at the same priority. With Call Selection Override turned on, which call does he receive?

Skill	Skill level	Overload threshold	Predicted wait time
A	1	20	5 seconds
B	1	20	10 seconds
C	2	20	40 seconds

The agent receives the call from skill C because skill C is in an over-threshold state and Call Selection Override selects calls from over-threshold skills first. If Call Selection Override is not turned on, the agent receives the call from skill B, for which he has the highest assigned skill level and which has the longest predicted wait time.

> **Note:**
> If Percent Allocation is used, the only way a call is selected based on the threshold is if Call Selection Override is on. If Call Selection Override is off, the threshold is ignored.

Sending Direct Agent Calls first

Although the Direct Agent Calls feature is not a call selection method, it is important to note that you have the ability to send Direct Agent Calls to an agent first, before other ACD calls. This is helpful when you want to be sure that the same agent is available to serve a follow-up call or a repeat customer. You can choose to select Direct Agent Calls first, regardless of the call handling preference that is administered.

The following table shows how Direct Agent Calls work with the different call handling preferences.

If the call handling preference is . . .	Then Direct Agent Calls are sent first . . .
Greatest Need	to an agent.

If the call handling preference is . . .	Then Direct Agent Calls are sent first . . .
Skill Level	to an agent if the Direct Agent skill has the highest assigned skill level.
Percent Allocation	to an agent if `y` was entered in the `Direct Agent Calls First?` field on the Agent LoginID form (or if the **yes** checkbox was selected using the Change Agent Skills form in CMS Supervisor)

Note:
This information also applies for skills that are in an overload condition. Direct Agent Calls are sent to an agent first, before any calls from an over-threshold skill.

Dynamic Queue Position

This section includes the following topics:

- What is Dynamic Queue Position? on page 27
- How does Dynamic Queue Position work? on page 28
- Dynamic Queue Position example on page 28

What is Dynamic Queue Position?

A feature called Dynamic Queue Position gives you the ability to queue calls from multiple Vector Directory Numbers (VDNs) to a single skill, while maintaining different service objectives for those VDNs. Newly arriving calls are inserted in queue based on a comparison of ratios of estimated times in queue for new calls and for calls already in queue, the administered service objectives for the originating VDNs.

How does Dynamic Queue Position work?

The following figure shows how different service objectives can be used for various VDNs and queued to a single skill, which simplifies staffing and forecasting.
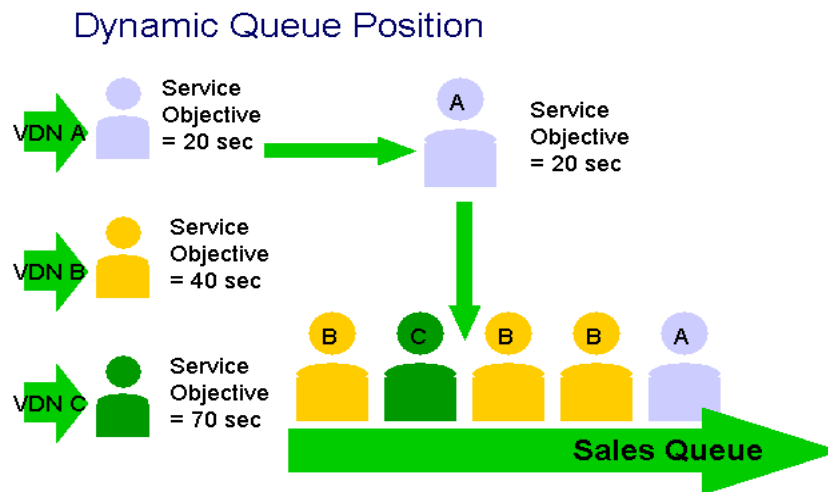
Dynamic Queue Position example

Dynamic Queue Position is valuable for businesses that want to support customer segmentation. Consider, for example, a business that receives customer service calls from a wide range of customers and wants to differentiate in how it handles calls from customers depending upon their service policy. Since each agent is already handling all types of customers, a single skill can suffice. A differentiation is needed, however, in terms of how quickly calls are handled. This is accomplished by assigning a different service objective to the VDNs that correspond to the varying sets of customers. The service objective for the customers with a high-range policy is assigned a service objective of 10 seconds. The service objective for customers with mid-range policies are set at 20 and 25 seconds. Customers without a policy are handled through a VDN with a service objective of 40 seconds.

As calls arrive they are placed in queue so that the average speed with which calls from each VDN are answered is roughly proportional to the service objectives of the VDN. Customers with a high-range policy will tend to be placed in front of some of the other calls, but will not necessarily be placed in front of all of them. This arrangement allows the contact center to continue to operate with a single skill defined, forecasted, and staffed. This also prevents problems that result from just queuing calls at different priority levels within the same queue. For example, calls queued at low priority will be ignored if there is a significant volume of higher-priority calls.

This feature is administered on the VDN form and the Hunt Group form. See Administering Dynamic Queue Position on page 100 for administration procedures.

Call selection examples

The following examples show how the various types of call selection work. For these examples, assume that calls are in queue for three skills that an agent is eligible to serve. Each scenario is based on the same skills and call wait times so that you can more easily see the effects of call selection methods. The examples include the use of Greatest Need with and without Service Objective, Skill Level with and without Service Objective, and Percent Allocation, which is not used with Service Objective.

This section includes the following topics:

Greatest Need without Service Objective

In the following example, Greatest Need is administered for each of the available agent's skills. Service Objective is not activated for this agent, and Predicted Wait Time (PWT) is set at the system level. All calls are queued at the same priority. Which call is selected first when the agent becomes available?

Skill number	PWT
1	45 seconds
2	90 seconds
3	50 seconds

Using Greatest Need without Service Objective, the call in skill 2 is selected. This is because Greatest Need is administered in this situation, and calls are selected according to the highest Predicted Wait Time (PWT).

Greatest Need with Service Objective

In the following example, service objectives were added to call selection for each skill by administering Service Objective. All calls are queued at the same priority. Which call is selected first if calls are queued for an agent who is eligible to serve all three skills?

Skill number	Service objective	PWT
1	20 seconds	45 seconds
2	45 seconds	90 seconds
3	20 seconds	50 seconds

In this situation, the call in skill 3 is selected because it is at the highest percentage (250%) of the 20-second service objective for that skill. Remember that the ratio used with Service Objective is PWT/SO. The 90-second call, in this case, with a service level of 45 seconds, is only at 200% of the service objective and therefore is not selected.

Skill Level without Service Objective

In the following example, the Skill Level call handling preference is set for the agent's three skills. Service Objective is not set for this agent. All calls are queued at the same priority. Which call does the agent receive in this situation?

Skill number	Skill level	PWT
1	1	45 seconds
2	1	90 seconds
3	4	50 seconds

In this situation, the 90-second call in skill 2 is selected because it is the oldest call in the agent's highest level skill.

Skill Level with Service Objective

In the following example, Service Objective is administered with Skill Level. All calls are queued at the same priority. Which call is selected for the agent?

Skill number	Skill level	Service objective	PWT
1	1	20	45 seconds
2	1	45	90 seconds
3	2	20	50 seconds

In this situation, the agent receives the call waiting in skill 1. Business Advocate identifies two level-1 calls in queue and selects the call that has the highest ratio of PWT to administered Service Objective (PWT/SO).

Percent Allocation

In the following example, Percent Allocation is administered for each of the agent's three skills. If the agent has already spent 45% of his time serving skill 1, 35% of his time serving skill 2, and 10% of his time serving skill 3, which of the queued calls is selected for him?

Skill number	Target allocations	Actual work time	Adjusted work time	PWT
1	60%	45%	49%	45 seconds
2	30%	35%	40%	90 seconds
3	10%	10%	17%	50 seconds

The agent has spent more time on skills 2 and 3 than the plan calls for. Therefore, he receives the call in skill 1, since selecting this call minimizes the deviation between actual work time and the target allocation.

Note:
Neither PWT nor CWT is used in the call selection process when Percent Allocation is administered for an agent.

Selecting agents

This section includes the following topics:

Agent selection methods

Agent selection methods are activated when there are one or more agents available to handle an incoming call (this is known as an agent surplus condition). Business Advocate allows you to select agents by idleness in a skill (Most Idle Agent), occupancy across all skills (Least Occupied Agent), or a predetermined percentage of work time for a skill (Percent Allocation Distribution). These methods are administered on the Hunt Group form and are also known as hunt group types.

This section includes the following topics:

How agents are selected for calls

When more than one agent is eligible to serve a call, Communication Manager determines which of the eligible agents should be selected based on the agent selection method that you administered. This process includes consideration of the following:

- Which agents are eligible to serve a call from that skill?
- What agent selection method is administered for the skill?
- Which of the eligible agents is most appropriate to serve the call based on the administered agent selection method?

Agent selection options

Business Advocate offers the following agent selection methods:

- Most Idle Agent (MIA) selects an agent based on the time since completion of the last ACD call.

- Least Occupied Agent (LOA) selects an agent based on the agent's occupancy across all skills.

- Percent Allocation Distribution (PAD) selects an agent based on a predefined allocation for a skill and the adjusted work time for the skill.

Most Idle Agent (MIA)

MIA selects the most idle agent with the assigned skill for the incoming call. With this method, the call is delivered to the agent who has been idle the longest.

There are two types of MIA selection:

- Expert Agent Distribution - Most Idle Agent (EAD-MIA):

   Selects the most idle agent who is at the highest skill level for the skill. Note that Communication Manager considers skill level first. If there is only one agent at the highest skill level, that agent is selected. If there is more than one agent available at that skill level, idle time in queue is used to determine which agent is selected.

- Uniform Call Distribution - Most Idle Agent (UCD-MIA):

   Selects the most idle agent in a skill, regardless of the agent's skill level.

Least Occupied Agent (LOA)

LOA selects agents based upon their occupancy across skills rather than their position in an idle agent queue. The occupancy includes the agent's time with ACD calls ringing, ACD calls active, ACD calls on hold, and after call work (ACW) time if ACW time is considered work time. It is designed to spread calls more evenly among agents and reduce the number of "hot seats," that is, a situation in which some agents receive more calls than others.

There are two types of LOA selection:

- Expert Agent Distribution - Least Occupied Agent (EAD-LOA):

   Takes the skill level of agents into consideration before distributing a call. It selects the least occupied agent who is at the highest skill level for the skill to take the incoming call. Note that the switch considers skill level first. If there is only one agent at the highest skill level, that agent is selected. If there is more than one agent available at that skill level, occupancy is used to determine which agent is selected.

- Uniform Call Distribution - Least Occupied Agent (UCD-LOA):

   Selects the least occupied agent when more than one agent is available to take a call. UCD-LOA does not consider the agent's skill level when distributing the call.

Note:
Occupancy levels are more equal under UCD-LOA distribution. EAD-LOA results
may vary depending on how skills and the related skill levels are assigned to the
agents.

LOA and extension calls

The following table shows how LOA tracks extension calls:

If the extension call . . .	Then LOA . . .
is in AUX	ignores this time
is in Auto-In/Manual-In with no ACD call on hold	tracks this as idle time
is in Auto-In/Manual-In with an ACD call on hold	tracks this as work time
is in ACW	tracks this as idle time if `ACW Considered Idle?` is set to **y** on System-Parameters Form tracks this as work time if `ACW Considered Idle?` is set to **n** on the System-Parameters form

Agent occupancy

It is important to note that occupancy is reinitialized when an agent exits the AUX work mode.
The agent's occupancy, when reinitialized, is based on the current occupancy of other agents
who are administered with similar skills (peer agents.)

Percent Allocation Distribution (PAD)

PAD uses an agent's target percentage allocations and the adjusted work time for the agent's
assigned skills to determine whether the agent is selected to serve a call under an agent
surplus condition. Using the Agent LoginID form, you assign a percentage to each of the agent's
assigned skills (for a total of 100%).

During the agent selection process, the switch uses the agent's current work time and target
allocation for that skill. It is important to note that the selection process favors agents with higher
target allocations over agents with lower allocations. For example, if agent A is assigned a
target allocation of 80% and her work time for the skill is at 85%, the agent may be selected
over agent B, who is assigned 20% and is currently at 15% for the skill.

Use this agent selection method only with the Percent Allocation call selection method, which uses an agent's target allocations when determining which skill to select under agent surplus conditions. For best results, when using PAD as an agent selection method for a skill, it is recommended that you administer Percent Allocation as the call handling preference for all agents in the skill. See Administering Percent Allocation for call and agent selection on page 95 for administration procedures.

Agent selection when a new call arrives

The following table shows how the various agent selection methods work when agents are available and a new call arrives:

If the hunt group type is . . .	When agents are available and a new call arrives, the next agent selected is the . . .
EAD-LOA	available agent with the highest skill level and the lowest occupancy (compared to other available agents with the same skill level)
UCD-LOA	available agent with the lowest occupancy.
EAD-MIA	available agent with the highest skill level who has been idle the longest since his last ACD call (compared to other available agents with the same skill level)
UCD-MIA	available agent who has been idle the longest since his last ACD call
PAD	agent whose adjusted work time is the lowest percentage of the target allocation

Agent selection examples

The following examples each use the same agents and profiles to demonstrate how agent selection works. All of these examples assume that agents are available, no calls are waiting, and a new call has just arrived.

This section includes the following topics:

- EAD-LOA on page 36
- UCD-LOA on page 36
- EAD-MIA on page 36
- UCD-MIA on page 37
- PAD on page 37

EAD-LOA

Using Expert Agent Distribution-Least Occupied Agent (EAD-LOA), if the following three agents are available to serve the arriving Sales skill call, which agent receives the next call?

Agent	Skill level	Occupancy
A	1	90%
B	1	95%
C	2	64%

Agent A receives the next arriving call from the Sales skill because Agent A is the highest level, least occupied agent.

UCD-LOA

With the same agents available for the arriving Sales skill call, but with Uniform Call Distribution-Least Occupied Agent (UCD-LOA) administered instead of EAD-LOA, which agent receives the next call?

Agent	Skill level	Occupancy
A	1	90%
B	1	95%
C	2	64%

Agent C receives the next arriving call for the Sales skill. With UCD, skill levels are not considered during agent selection, and Agent C has the lowest percentage of work time, that is, time working in this skill divided by staffed time.

EAD-MIA

In the following example, the same three agents are available to serve the next arriving Sales skill call, but Expert Agent Distribution-Most Idle Agent (EAD-MIA) is administered. Which agent is selected for the call?

Agent	Skill Level	Time since last Sales call
A	1	5 seconds
B	1	10 seconds
C	2	30 seconds

Agent B receives the next arriving call for the Sales skill because Agent Bis the highest skill level agent who has been idle longest in this skill. Notice that while Agent C has been idle the longest, Agent C cannot be selected due to the EAD component of the decision; in other words, Agent C has been assigned a lower skill level.

UCD-MIA

Using the same agents and conditions, but administering Uniform Call Distribution (UCD-MIA), which agent is selected to receive the next arriving Sales skill call?

Agent	Skill Level	Time since last Sales call
A	1	5 seconds
B	1	10 seconds
C	2	30 seconds

Agent C receives the next arriving call for the Sales skill because with UCD-MIA; calls are distributed evenly across agents according to idle time in queue without regard to skill level.

PAD

Using the same agents, but administering Percent Allocation Distribution (PAD), which agent is selected to receive the next arriving Sales skill call?

Agent	Target allocation	Current work time	Adjusted work time	Percentage of target
A	25%	30%	35%	140%
B	50%	45%	49%	98%
C	75%	76%	78%	103%

Agent B is selected for the next call for the Sales skill because his adjusted work time is the lowest percentage of the target allocation.

Note:
Adjusted work time is an intermediate calculation that Business Advocate makes for each of these three agents. The percentage of target is a comparison of the adjusted work time and the target allocation.

Call selection during call surplus

The following table shows what happens during call surplus conditions, according to the call selection methods that are administered on the switch.

If calls are waiting when an agent becomes available and the agent's selection method is . . .	Then the switch takes the highest priority call . . .
Skill Level without Service Objective	with the highest skill level and the longest CWT or PWT
Skill Level with Service Objective	with the highest skill level and the highest ratio of CWT/SO or PWT/SO
Greatest Need without Service Objective	with the longest CWT or PWT
Greatest Need with Service Objective	with the highest ratio of CWT/SO or PWT/SO
Percent Allocation	that is the oldest call waiting that best maintains the administered target allocations for all skills

Agent selection during agent surplus

The following table shows what happens during agent surplus conditions, according to the agent selection method that is administered.

When agents are available, a call arrives, and the agent selection method is . . .	Then the switch selects the . . .
EAD-MIA	highest skill level, most idle agent
UCD-MIA	most idle agent, without regard to skill level
EAD-LOA	highest skill level agent with the lowest occupancy
UCD-LOA	least occupied agent, without regard to skill level
PAD	agent with the lowest ratio of adjusted work time and target allocation for the skill

Automated agent staffing adjustments

Business Advocate offers several ways to automate staffing adjustments and enhance your contact center operation under changing conditions. This section provides details on the many options that are available to help automate your staffing.

With Business Advocate, you can automatically activate reserve agents when the skills exceed overload thresholds you set. Additionally, you can use Dynamic Threshold Adjustment to automatically adjust thresholds as needed. If you are using Percent Allocation, you can automatically adjust target allocations for agents' work time as needed to meet service level targets, or you can choose to activate Auto Reserve Agents to leave an agent idle in a skill if the agent's work time exceeds that agent's preassigned allocation for that skill.

This section includes the following topics:

Reserve agents

This section includes the following topics:

Service Level Supervisor

Using Service Level Supervisor, you can administer one or two overload thresholds for a skill that is supported by reserve agents. When the Expected Wait Time (EWT) for an arriving call (or optionally, the time in queue of a currently queued call) exceeds the threshold, the skill goes into an overload state. When the appropriate overload state exists, agents who are preassigned to assist during overload periods are eligible to receive subsequent calls from the overloaded skill. Service Level Supervisor alleviates the need to move agents from skill to skill during emergencies or unanticipated peaks in call volume.

For information about how SLS works with Location Preference Distribution, see Reserve agents and Location Preference Distribution on page 111.

What happens when a skill goes over threshold

A skill goes over threshold when either the EWT or the time in queue (Oldest Call Waiting) exceeds a preadministered threshold. When a skill goes over threshold, reserve agents are activated or call selection override is activated, according to which of these options you administered.

Assigning reserve agents

You can assign reserve agents to assist with skills that become overloaded during peak times. You can assign reserve skills in addition to an agent's standard skills or you can assign reserve skills to an agent who would not handle calls unless contingency operations are in effect. Reserve skills are not mandatory, but they are a convenient method for automatically triggering contingency operations for your contact center.

You can administer two reserve levels:

- Reserve Level 1 - Agents are eligible to receive calls from the overloaded skill when the first or second administered threshold is exceeded

- Reserve Level 2 - Agents are eligible to receive calls from the overloaded skill when the second administered threshold is exceeded.

See Administering Service Level Supervisor on page 103 for procedures on assigning reserve skills for agents.

Activation of reserve agents

Reserve agents can be activated at each overload threshold. These reserve agents are eligible to take calls from a reserve skill only when that skill is in an overload state. When the skill returns to a normal state, calls from that skill are no longer sent to reserve agents.

Considerations for reserve skills

If you determine that you want to administer reserve skills, consider the following questions for each skill:

- Which agents are able to back up that skill?

- Are you willing to have agents occasionally shift from their accustomed work in order to serve as reserve agents for the skill? Remember that agents are often less effective or more costly when handling calls from skills that are not their primary assignments.

- Which reserve levels will you assign for selected agents?

Overload thresholds

When using reserve agents, you need to assign overload thresholds that determine when contingency operations go into effect for a skill. Overload thresholds determine the point at which reserve agents become eligible for work on the over-threshold skill. You can set one or two overload thresholds that determine how long callers wait in queue before reserve agents are activated. These thresholds are set individually on the Hunt Group form for each skill that uses reserve agents.

See Administering Service Level Supervisor on page 103 for procedures on assigning overload thresholds for skills.

Dynamic Threshold Adjustment

Dynamic Threshold Adjustment is a Service Level Supervisor feature that provides you with an increased level of automation for your staffing. With this feature, you administer one or two overload thresholds and a service level target. The switch uses this information to determine when to automatically adjust overload thresholds to help meet the administered service level. This feature activates reserve agents a bit sooner or a bit later, as needed to maintain your organization's service levels. Dynamic Threshold Adjustment is administered individually for each skill for which you want to use the feature. If you prefer not to use Dynamic Threshold Adjustment, you can still use Service Level Supervisor; however, automatic adjustments will not be made to the overload thresholds you set.

> **Note:**
> Dynamic Threshold Adjustment is most effective when you administer only one overload threshold and set it at the service objective. If you elect not to activate this feature but still want to use Service Level Supervisor, you can choose to set one or two overload thresholds to activate reserve agents.

It is important to note that there is a minimum and maximum range for Dynamic Threshold Adjustments. The adjustments are made as needed, from 0% to 200% of the administered value. If you set the threshold at 20 seconds, for example, the adjusted thresholds can vary from 5 to 80 seconds as required to meet your service level targets.

See the Administering Service Level Supervisor on page 103 for procedures on setting up Dynamic Threshold Adjustment.

Dynamic Percentage Adjustment

If service levels are particularly important to you and you want to have more control over the amount of time that an agent spends serving a skill, you might consider the Dynamic Percentage Adjustment feature. With this feature you establish service level targets for each skill on the Hunt Group form, and the switch makes automatic adjustments to agents' target allocations as needed to ensure that your percent in service level goals are met.

For example, with Dynamic Percentage Adjustment, an agent who has a 70% target for Sales and a 30% target for Service may have his plan adjusted to 76% Sales and 24% Service in the morning, when Sales is very busy. Later in the day, the plan may be adjusted to 66% Sales calls and 34% Service calls, as the volume of Service calls increases. Without Dynamic Percentage Adjustment, the level of service for Sales would have been adversely affected in the morning and the level of service for Service would have been adversely affected in the afternoon.

See Administering Percent Allocation for call and agent selection on page 95 for procedures on setting up Dynamic Percentage Adjustment.

Auto Reserve Agents

The Auto Reserve Agents feature intentionally leaves an agent idle in a skill when the agent's work time for that skill exceeds her assigned target allocation. You can use this feature when it is particularly important to control an agent's time in a skill. You might activate this feature to ensure that a particularly proficient agent is available for your highest priority customers, or to more closely control where the agent spends his time to better meet your organization's sales or service goals.

When an agent is in Auto Reserve and a call is in queue, one of three things typically happens:

- Another agent becomes available and takes the call in queue.

- A call arrives in a skill for which the agent is not auto reserved and the agent takes that call.

- The agent's work time in the skill drops below her allocation. Now that she is no longer auto reserved, she takes the waiting call.

This feature is activated on the System-Parameters Features form. Using the Agent LoginID form and skill levels for each of an agent's skills, you can determine in which (if any) skills you want to leave the agent idle when his work time exceeds his target allocation. You can activate the feature for all of an agent's skills by entering **all** in the Auto Reserve Agents field or only for their nonprimary (level 2 to 16) skills by entering **secondary-only**. If secondary-only is selected, the agent never goes into auto reserve if a level 1 call is waiting.

See Administering Percent Allocation for call and agent selection on page 95 for procedures to activate Auto Reserve Agents.

Developing your strategy

Business Advocate offers many features and feature combinations that can help you to meet your business goals. This section provides you with information about which features work best together and which combinations you might consider for your operation.

This section includes the following topics:

- Combining agent and call selection methods on page 43
- Different needs within a contact center on page 44
- Avaya support for Business Advocate on page 45
- Feature compatibility on page 45

Combining agent and call selection methods

Business Advocate provides a variety of features to help meet your business goals and to help you manage your agent resources. The following table shows some of the ways that you can combine call and agent selection methods to meet your company's specific needs. See Business Advocate solution examples on page 49 for sample scenarios that use some of these combinations.

If your goal is to . . .	Then consider . . .
Maintain service levels while controlling the time agents spend serving each of their skills	● Percent Allocation ● Dynamic Percentage Adjustment ● PAD
Maintain service levels using more or less time from reserve resources to supplement staffing as needed	● Greatest Need ● Service Level Supervisor ● Dynamic Threshold Adjustment ● UCD-LOA
Add customer segmentation with differentiated levels of service while routing all segments to the same skill to simplify staffing	● Greatest Need ● Dynamic Queue Position ● UCD-LOA
Increase revenue by assigning agents their best skills as primary skills and limiting the use of reserve skills to eliminate long call wait times	● Greatest Need ● Service Objective ● Service Level Supervisor ● UCD-LOA

If your goal is to . . .	Then consider . . .
Ensure that critical skills are covered, regardless of caller wait time in other skills	• Greatest Need • Service Level Supervisor • Call Selection Override • Activate on Oldest Call Waiting • UCD-LOA
Control the time your agents spend serving their assigned skills while maintaining flexibility in order to meet service level requirements for the contact center	• Percent Allocation • Dynamic Percentage Adjustment • Call Selection Override • Service Level Supervisor • PAD
Automate agent staffing to activate back up agents a little sooner or a little later to meet service level goals	• Greatest Need or Skill Level • Service Level Supervisor • Dynamic Threshold Adjustment • UCD-LOA or EAD-LOA
Minimize the complexity of differentiating service levels for different types of calls that require similar agent abilities	• Greatest Need or Skill Level • Dynamic Queue Position • UCD-LOA or EAD-LOA
Maximize the amount of time that agents spend in high contribution roles while limiting the amount of time using lesser skills in order to address wait time problems	• Greatest Need • Service Objective • UCD-LOA
Spread calls more evenly among agents while delivering the right level of service to each skill	• Greatest Need • Service Objective • UCD-LOA
Use agents in their most proficient skills while minimizing the hot seat problem	• Skill Level • EAD-LOA

Different needs within a contact center

You may find that one Business Advocate solution does not fit for your entire organization. Your contact center may have different needs within particular areas or departments; Business Advocate may help you meet varying needs. A sales department, for example, may choose to use Dynamic Queue Position to create differentiation among various types of customers without creating a different skill for each type of sales call. A service department, on the other hand, may be more interested in working toward similar goals for each technical support skill, while eliminating the "hot seats" often experienced by well trained, multi-skilled agents.

Avaya support for Business Advocate

Avaya offers a subscription service for Business Advocate customers that provides access to skilled consultants with expertise in understanding how Business Advocate helps to solve business problems and meet business objectives.

The subscription provides:

● Proactive monitoring of certain performance metrics consistent with business objectives

● Web-based information and tips

● Multi-media contact support, available through voice and e-mail, for questions and consultation

Additional specialized services, such as simulation and performance analysis, can also be conducted.

For more information, please contact your Avaya Account Executive or CRM Opportunity Management at 1-877-9-CRM OMC.

Feature compatibility

It is important to choose the right combination of features to meet your organization's needs and ensure that Business Advocate is set up to work most effectively. This section summarizes the features that provide the best results when used together, and it also lists those that are not designed to work together. See Administering Business Advocate on Communication Manager on page 79 for procedures to set up these features.

This section includes the following topics:

● Call selection methods (call handling preferences) on page 46

● Agent selection methods (hunt group types) on page 46

● Feature combinations to avoid on page 47

Call selection methods (call handling preferences)

The following table shows the features that work effectively with the various Business Advocate call selection methods.

Call selection method	Recommended to work with
Greatest Need	● Predicted Wait Time ● Service Objective ● Service Level Supervisor ● UCD-MIA ● UCD-LOA
Skill Level	● Predicted Wait Time ● Service Objective ● Service Level Supervisor ● EAD-MIA ● EAD-LOA
Percent Allocation	● Dynamic Percentage Adjustment ● Auto Reserve Agents ● Service Level Supervisor ● PAD

Agent selection methods (hunt group types)

The following table shows which features work with the various agent selection methods.

Agent selection Method	Recommended to work with
UCD-MIA	● Greatest Need ● Predicted Wait Time ● Service Objective ● Service Level Supervisor
EAD-MIA	● Skill Level ● Predicted Wait Time ● Service Objective ● Service Level Supervisor
UCD-LOA	● Greatest Need ● Predicted Wait Time ● Service Objective ● Service Level Supervisor3

Agent selection Method	Recommended to work with
EAD-LOA	● Skill Level ● Predicted Wait Time ● Service Objective ● Service Level Supervisor
PAD	● Percent Allocation ● Dynamic Percentage Adjustment ● Auto Reserve Agents ● Service Level Supervisor

Feature combinations to avoid

The PAD agent selection method should not be used with Greatest Need or Skill Level call selection methods.

Business Advocate solution examples

This section provides examples of how Business Advocate can be used to help meet your contact center's goals. While the example situations may sound a bit different from yours, the scenarios should give you some ideas about how you can best use Business Advocate to help your business. Remember that these are not the only ways in which Business Advocate features can be used. See Overview of Business Advocate on page 13 for details about how each feature works and which feature combinations are most effective. Contact your Avaya Professional Services representatives for help with implementing your specific solution.

This section includes the following topics:

- Maintaining service levels - one scenario on page 50
- Adding customer segments on page 55
- Increasing revenue on page 60
- Automating agent moves to back up calls on page 66
- Controlling agent time in a skill on page 73

Maintaining service levels - one scenario

Service levels are critical for many contact centers. In some cases, for example, outsourcing companies are required to maintain specific service levels to meet contractual obligations to their customers. Other contact centers, however, might be required to maintain service levels to serve their internal customers, such as various lines of business within their company. The solution outlined in this scenario is one of many that could help a contact center that is focused primarily on maintaining service levels.

This particular solution involves the following Business Advocate features:

- Predicted Wait Time
- Greatest Need as the call selection method
- Universal Call Distribution-Least Occupied Agent (UCD-LOA) for agent selection
- Service Level Supervisor
- Dynamic Threshold Adjustment

This section includes the following topics:

Background information

An outsourcing company has contracts with several businesses, each one of which requires a different service level for their sales or service calls:

- Business A requires a service level of 90% in 15 seconds
- Business B requires a service level of 80% in 20 seconds
- Business C requires a service level of 75% in 45 seconds

Daily call volumes vary widely for each business as a result of promotions and other events. This makes it difficult for the contact center managers to forecast staffing needs and routinely maintain service levels. However, the contact center must be responsive to changing conditions

while ensuring that service levels are maintained to avoid financial penalties. Three skills are used, one for each business. Agents are trained to serve all three skills, but have varying levels of experience and proficiency. To keep efficiency as high as possible, the business wants to use agents in their primary areas of expertise.

Agent assignments are as follows:

● The most experienced agents are assigned businesses A and B as their primary skills. They are not assigned reserve skills.

● The next most proficient agents serve business B as their primary skill. These agents also serve as reserve agents for businesses A (R1) and C (R1).

● Newer agents and trainees are assigned business C as their primary skill and they serve as reserve agents for business B. Some agents serve as R1 and some serve as R2, depending upon their abilities. These agents do not serve business A.

Agent selection

UCD-LOA is used for agent selection so that the least occupied agent is selected for the call. This method spreads work time evenly among agents, and eliminates any "hot seats." After Call Work (ACW) is considered as work time in the calculation of agent occupancy.

> **Note:**
> The decision to include ACW as work time is not critical to implementing this example. This example works whether ACW time is considered as idle time or work time.

Call selection

Predicted Wait Time (PWT) is administered as the call selection measurement to predict how long a call will wait in queue if the currently available agent does not take the call.

Greatest Need is administered for call selection. In this situation, Greatest Need selects a skill for an agent to serve based on the call at the highest priority with the longest PWT.

Automated agent staffing

Service Level Supervisor is used to activate reserve agents when overload thresholds for a skill are exceeded. Dynamic Threshold Adjustment, with service level targets, is administered for each skill to adjust thresholds as needed to help meet service level targets under changing conditions. Call Selection Override is off.

Overload thresholds and service level targets

The following table shows how overload thresholds and service level targets are set on the Hunt Group form.

Business	Overload thresholds	Service level targets
A	Level 1: 10	90% in 15
B	Level 1: 15	80% in 20
C	Level 1: 35	75% in 40

Where administered?

The following table shows where each of these features is administered through the switch. See Administering Business Advocate on Communication Manager on page 79 for procedures on how to administer the feature.

If you want to activate . . .	Then enter . . .	On the . . .
After Call Work Considered Idle?	`n` in the `ACW Considered Idle?` field	Feature-Related System Parameters form
Predicted Wait Time	`predicted-wait-time` in the `Call Selection Measurement` field	Feature-Related System Parameters form
UCD-LOA	`ucd-loa` in the `Group Type` field for each skill	Hunt Group form (page 1)
Service Level Supervisor	`y` in the `Service Level Supervisor` field for each skill	Hunt Group form (page 2)
Overload Thresholds	seconds in the `Level 1 Threshold` field for each skill	Hunt Group form (page 2)
Dynamic Threshold Adjustment	`y` in the `Dynamic Threshold Adjustment` field for each skill	Hunt Group form (page 2)

If you want to activate . . .	Then enter . . .	On the . . .
Service Level Target	% in seconds in the `Service Level Target` field for each skill	Hunt Group form (page 2)
Greatest Need	**greatest-need** in the `Call Handling Preference` field for each agent	Agent LoginID form
Reserve Agents	**1** or **2** in the `Reserve Level (RL) field` for each skill an agent will serve as a reserve agent	Agent LoginID form

Results

Service levels are maintained with this solution because Dynamic Threshold Adjustment automatically adjusts thresholds as needed to activate agents sooner or later to meet a skill's service level targets. A sudden increase in call volume does not result in an increase in abandoned calls or the need for supervisors to move agents between skills to meet changing demands.

Measuring results

The following table shows some of the reports or commands that you can use to determine the effectiveness of this solution.

If you want to check . . .	And determine . . .	Use this report or command
% Within Service Level	Whether your service levels are being met for each skill	Real-Time Split/Skill Graphical Status report or Historical Split/Skill Graphical Service Level Report
● Normal time ● Overload 1 time ● Overload 2 time	● How much time was spent in normal time and in each overload state ● What percentage of the time standard agents are capable of keeping the skill on track	Graphical Skill Overload Report
Overload thresholds	Whether Dynamic Threshold Adjustment is making adjustments to thresholds as wanted. Note that you can also use the displayed threshold information (adjusted thresholds) to readminister your thresholds if you decide not to use Dynamic Threshold Adjustment	`list skill-status` command (SAT command that the system administrator can use)
● Activation of Reserve Agents ● Average ACD Time	● The number of calls handled by reserve l and reserve 2 agents ● What the average talk time is when reserve agents are handling the calls	Custom Report
Staffing	How your skill is staffed and what the agents are doing	Graphical Staffing Profile Report
● Normal time ● Overload 1 time ● Overload 2 time	How much time skills have spent in the various states	Graphical Skill Overload Report

Adding customer segments

Contact centers often need to differentiate service for their various markets as a result of varying customer needs, their company's strategy for sales or service, or even customer value. The example in this section uses the Dynamic Queue Position feature to allow this company to queue calls from multiple Vector Directory Numbers (VDNs) to a single skill, while maintaining service differentiation through the different service objectives for those VDNs. This solution simplifies administration and contact center management because it does not require the addition of skills for agents. It simplifies staffing and forecasting because only a single skill, rather than a set of skills, needs to be forecasted for the new, segmented customer base.

This solution also includes:

● Predicted Wait Time

● After Call Work (ACW) as work time

● Skill Level as the call selection method

● Expert Agent Distribution-Least Occupied Agent (EAD-LOA) for agent selection

This section includes the following topics:

● Background information on page 55

● Agent assignments on page 56

● Agent selection on page 56

● Call selection on page 56

● Service objectives on page 57

● Where administered? on page 57

● Results on page 58

● Measuring results on page 59

Background information

A company that sells home security systems is entering a new market and as a result of fierce competition must make a very favorable first impression on its new customers. The contact center takes both Sales and Service calls and each type is considered equally important. In addition to impressing new customers, it must continue to serve its existing customers, some of whom are willing to wait to be served and others who will abandon if forced to wait longer than a minute.

The customer segments are as follows:

- Region 1 - New customer market requiring the most aggressive service objectives

- Region 2 - Existing customer market with customers who will abandon quickly

- Region 3 - Existing customer market with customers who are more tolerant about waiting to be served

Agent assignments

All agents in the Sales skill serve customers from all three regions because calls from all three regions are directed toward the single Sales skill. All agents in the Service skill serve customers from all three regions because calls from all three regions are directed toward the single Service skill. All agents are assigned skill levels of 1, 2, or 3 on the Agent LoginID form, depending upon their proficiency and experience.

Agent selection

Expert Agent Distribution - Least Occupied Agent (EAD-LOA) is used for agent selection to ensure that the highest skilled, least occupied agent is selected for a call when one or more agents are available to serve a call.

Call selection

Call selection uses Predicted Wait Time (PWT) and the Skill Level call handling preference. Agents' proficiencies in Sales and Service are mapped into skill levels for the Sales skill and for the Service skill. For example, an agent who has top proficiency in Service, but only good proficiency in Sales will take a Service call over a Sales call if both are in queue when the agent became available. Service objectives are not in use; that is, Service Objective is not activated on the Agent LoginID Form.

- Top proficiency in Sales or Service - Level 1

- Good proficiency in Sales or Service - Level 2

- Fair proficiency in Sales or Service - Level 3

In general, PWT will come into use when calls are in queue for both the Sales and Service skills and the agent holds both skills at equal skill levels. In this situation, the call with the highest PWT is selected.

Service objectives

The following table shows how service objectives are administered for each of the VDNs on the Vector Directory Number form:

VDN	Service objective
11 - Sales VDN for new market	10 seconds
12 - Sales VDN for markets with high abandonment rates	15 seconds
13 - Sales VDN for markets with average or better abandonment rates	20 seconds
21 - Service VDN for new market	10 seconds
22 - Service VDN for markets with high abandonment rates	15 seconds
23 - Service VDN for markets with average or better abandonment rates	20 seconds

Where administered?

The following table shows where each of these features is administered through the switch. See Administering Business Advocate on Communication Manager on page 79 for procedures for administering the feature.

If you want to activate . . .	Then enter . . .	On the . . .
ACW Considered Idle?	`n` in the `ACW Considered Idle?` field	Feature-Related System Parameters form
Predicted Wait Time	`predicted-wait-time` in the `Call Selection Measurement` field	Feature-Related System Parameters form
Service Objective assigned to VDN	seconds in the `Service Objective` field for each VDN	Vector Directory Number form
EAD-LOA	`ead-loa` in the `Group Type` field	Hunt Group form (page 1)

If you want to activate . . .	Then enter . . .	On the . . .
Dynamic Queue Position	`y` in the `Dynamic Queue Position` field	Hunt Group form (page 2)
Skill Level call handling preference	`skill-level` in the `Call Handling Preference` field	Agent LoginID form
Service Objective	`n` in the `Service Objective` field	Agent LoginID form
Skill Levels	`1, 2,` or `3` in the `Skill Level (SL)` fields for the Sales and Service skills for each agent, according to the agent's proficiency	Agent LoginID form

Results

EAD-LOA for the hunt group method and Skill Level for call handling preference work together to ensure that during agent or call surplus conditions, the most skilled agent takes the call. Dynamic Queue Position uses the service objectives that are administered for each VDN to determine where to place the call in either the Sales queue or in the Service queue. As calls arrive, they are placed in queue so that the average speed of answer (ASA) of the calls from each VDN is proportional to the service objectives of the VDN. This means, for example, that new market customers will tend to be placed in queue ahead of some of the other calls, but not necessarily in front of all of them. If you recall, the service objectives are 10 seconds for new markets (VDNs 11 and 21), 15 seconds for markets with high abandon rates (VDNs 12 and 22), and 20 seconds for other markets (VDNs 13 and 23).

Measuring results

The following table shows some of the reports that you can review to determine the effectiveness of this solution.

If you want to check . . .	And determine . . .	Use this report
● Average Speed of Answer ● % Abandoned Calls ● % Within Service Level	How the Sales skill and Service skill are performing overall	Real-Time Split/Skill Graphical Status Report or Historical Split/Skill Graphical Service Level Report (through CMS Supervisor)
● Average Speed of Answer ● % Abandoned Calls ● Maximum Delays ● % Within Service Level	How each VDN (Region) is performing, particularly against each other, and how well the ratios of the ASAs follow the ratios of the administered service objectives	VDN Call Profile Report, VDN Graphical Call Profile Report, or VDN Service Level Report

Increasing revenue

Many contact centers are responsible for a significant amount of their company's revenue, and most are seeking ways to increase that revenue. The following retail-based example shows one of the many ways that Business Advocate can help increase a contact center's revenue.

This solution includes:

- Predicted Wait Time (PWT)
- Service Level Supervisor
- Service Objective
- Greatest Need as the call selection method
- Universal Call Distribution-Least Occupied Agent (UCD-LOA) for agent selection

This section includes the following topics:

- Background information on page 60
- Agent assignment on page 61
- Agent selection on page 62
- Call selection on page 62
- Automated agent staffing on page 62
- Overload thresholds and service objectives on page 62
- Where administered? on page 63
- Results on page 64
- Measuring results on page 65

Background information

A catalog company that sells home furnishings and accessories is looking for ways to increase sales by taking full advantage of every selling opportunity and making the best use of their agent resources. The top agents are at a significantly higher pay rate than the new hires, so it is important to make sure that the most experienced agents help those customers who spend a lot and expect excellent service. The least experienced agents, on the other hand, take clearance orders from customers who typically spend the least. As a result of their sales data and past experience with customers, the company has identified most of their customers as one of four types. Platinum customers spend the most and are most likely to purchase add-on merchandise suggested by agents. Gold customers spend a fair amount, but typically purchase just the items they called to order. Silver customers are known for purchasing only merchandise that has been marked down for clearance. New and unknown customers form a fourth customer segment.

The goal is to focus each agent's time as much as possible on a targeted set of customers. Dedicating each agent to a customer segment will accomplish this goal, but it will also leave the contact center vulnerable to maintaining good overall service levels if call volumes for any of the customer segments are higher than expected. To solve this problem, each agent is assigned to another customer segment when needed.

Agent assignment

Agents are grouped into four tiers, according to their abilities.

- Tier 1 agents are the most proficient agents. They are top at sales and are particularly effective at upselling. These agents serve the Platinum skill as their primary or "focus" skill. They serve the Gold (R1) skill as reserve agents.

- Tier 2 agents are good at selling standard merchandise, but are not as effective with add-on sales. They are very effective at introducing new customers to the company's catalog. They serve the Gold and New/Unknown skills as their primary skills. These agents serve the Platinum (R1) and Silver (R2) skills as reserve agents.

- Tier 3 agents have nearly the same ability as Tier 2, but they should spend less time with Platinum customers and more with Silver customers as the need arises. These agents serve the Gold and New/Unknown skills as primary skills. They serve the Platinum (R2) and Silver (R1) skills as reserve agents.

- Tier 4 agents are less experienced and many are still in training. Their primary skill is Silver. These agents serve the Gold (R2) and New/Unknown (R1) skills as reserve agents.

The following table shows the skill assignments that are described above. By making the less optimal agent-customer pairings reserve skills, the time each agent spends in his focus or primary skill is maximized. This results in revenue benefits and operational cost benefits for the company.

Agent group	Platinum	Gold	Silver	New/unknown
Tier 1	Primary	Reserve 1		Reserve 2
Tier 2	Reserve 1	Primary	Reserve 2	Primary
Tier 3	Reserve 2	Primary	Reserve 1	Primary
Tier 4		Reserve 2	Primary	Reserve 1

Agent selection

UCD-LOA is used for agent selection so that the least occupied agent is selected for the call. This spreads work time evenly among the primary or focus agents for each customer segment and eliminates any hot seats, that is, a situation in which some agents receive more calls than others. Since agents are encouraged to process each order completely during the call, After Call Work (ACW) is *not* considered as work time in the calculation of agent occupancy.

Call selection

Greatest Need is administered for call selection and Predicted Wait Time (PWT) is activated for call selection measurement. Greatest Need, when used with Service Objective, selects a call for an agent according to the ratio of PWT and the administered service objective (PWT/SO) for the agent's assigned skills. The highest priority call with the highest PWT/SO is selected. The use of PWT and Service Objective is important for the agents who have focus assignments in two or more skills.

Automated agent staffing

Service Level Supervisor is used to activate reserve agents when overload thresholds for a skill are exceeded. Service Level Supervisor Call Selection Override is off, because call selection should never ignore calls that are waiting for an agent's focus skill. Dynamic Threshold Adjustment is not activated because the company prefers to set and monitor its thresholds. If thresholds drop merely to help the center make its percentage in service level numbers, the number of focus calls each agent takes also drops. This results in loss of revenue and transaction costs that are higher than necessary.

Overload thresholds and service objectives

Given the way skill assignments are set, service objectives play a role when either Tier 2 or Tier 3 agents become available, because these types of agents have two primary skills. Service objectives are implemented for all skills, however, and Service Objective is activated for call handling on each agent's Agent LoginID form. Therefore, if any of an agent's reserve skills go into overload, the agent's call selection is properly governed. Since each skill has two levels of reserves, two overload thresholds are administered for each skill and the settings reflect the business interest to back up higher-revenue calls more readily.

The following table shows the values for the current settings:

Customers	Overload thresholds	Service objectives
Platinum	Level 1: 20 Level 2: 30	20
Gold	Level 1: 45 Level 2: 60	45
Silver	Level 1: 60 Level 2: 75	60
New/unknown	Level 1: 45 Level 2: 60	45

Where administered?

The following table shows where each of these features is administered through the switch. See Administering Business Advocate on Communication Manager on page 79 for procedures for administering the feature.

If you want to activate . . .	Then enter . . .	On the . . .
After Call Considered Idle?	`y` in the `ACW Considered Idle?` field	Feature-Related System Parameters form
Predicted Wait Time	**predicted-wait-time** in the `Call Selection Measurement` field	Feature-Related System Parameters form
UCD-LOA	**ucd-loa** in the `Group Type` field	Hunt Group form (page 1)
Service Objective	number of seconds in the `Service Objective` field for each skill	Hunt Group form (page 2)
Service Level Supervisor	`y` in the `Service Level Supervisor` field	Hunt Group form (page 2)
Overload Thresholds	number of seconds in the `Level 1` and `Level 2 Threshold` fields for each skill	Hunt Group form (page 2)

If you want to activate . . .	Then enter . . .	On the . . .
Greatest Need call handling preference	`greatest-need` in the `Call Handling Preference` field	Agent LoginID form
Service Objective	`y` in the `Service Objective` field for each agent	Agent LoginID form
Reserve Agents	`1` or `2` in the `Reserve Level (RL)` fields as appropriate, according to agent's tier profile	Agent LoginID form

Results

Service objectives and Predicted Wait Time govern call selection for agents with two primary skills or for an agent with reserve skills when the reserve skill is in overload. When the contact center experiences sudden increases in call volume for a skill, the overload thresholds activate reserve agents. By assigning hunt groups and reserve agents based on agent proficiency, the company is keeping agents serving calls for which they are most qualified. This means that sales should remain high and calls should be handled efficiently.

Measuring results

The following table shows some of the reports and some of the database items that you can review to determine the effectiveness of this solution.

If you want to check . . .	And determine . . .	Use this report
● Average Speed of Answer ● Average Abandon Time ● Average ACD Time ● Maximum delay	How each skill is performing: ● How quickly calls are being answered ● When customers are abandoning ● Average talk time	Real-Time Split/Skill Graphical Status report
Percent of time a skill was in each overload condition	How often overload thresholds are being exceeded. If skills spend too much time in overload, it is generally a good indication that more primary agents are needed for the skill.	Historical Graphical Skill Overload report
Activation of reserve agents	● How many calls are being answered by reserve 1 and reserve 2 agents. The more often calls are served by reserve agents, the less often the optimal or focus agent is taking the call. ● Whether average talk time increases significantly when reserve agents serve calls.	Custom Report

Automating agent moves to back up calls

Contact centers are often faced with the need to handle unexpected peaks in call volumes using existing staff. Whether this condition is a result of special promotions, seasonal conditions, or unexpected acts of nature, the challenge is to serve as many calls as possible to meet the customer's needs and maintain the company's requirements for service levels. Because utility companies frequently face this situation, the following example shows how a utility company uses Business Advocate to ensure that critical calls are given priority, standard calls are served, and reserve agents are in place as backups.

This example includes:

● Predicted Wait Time (PWT)

● Service Level Supervisor

● Dynamic Threshold Adjustment

● Greatest Need as a call selection method

● Universal Call Distribution - Least Occupied Agent (UCD-LOA) for agent selection

Call Selection Override is on or off by skill, depending on the skill.

This section includes the following topics:

Background information

A gas and electric utility company has many different types of calls to handle, some of which are of an urgent nature and require immediate assistance. Typical calls include requests to connect and disconnect service for residential and commercial accounts, reports of power outages or gas leaks, billing or collection calls, and calls from the police or fire departments. The company

uses an interactive voice response (IVR) system to help determine how the calls should be routed and to prompt customers for account numbers. The IVR prompting helps customers report gas leaks or downed electric lines so that these calls can reach agents as quickly as possible. Additionally, the company has implemented a technology solution that enables the switch to differentiate calls from police and fire departments from routine calls and route them for immediate attention.

In terms of priority, calls from police and fire departments and calls from customers who are reporting gas leaks or downed electric lines are considered most important. These calls are queued at high priority and are backed up very quickly. Less important calls are queued at medium priority. These calls include reports of power outages, requests to connect or disconnect service from business accounts and residential accounts, and arrangements for payment.

Agent assignments

All agents are trained to handle residential accounts, including setting up new service, restoring service, disconnecting service, or reporting power outages. The company's most experienced agents are used for emergency skills, business accounts, and payment arrangements.

The following table shows agent assignments.

Agents	Emergency	Payment arrangements	Business accounts	Residential accounts
Group 1	Primary	Primary	Reserve 1	
Group 2	Reserve 1	Primary	Reserve 2	
Group 3	Reserve 2		Primary	Reserve 1
Group 4	Reserve 2			Primary

Agent selection

Expert Agent Distribution - Least Occupied Agent (EAD-LOA) is used as an agent selection method for the business and payment arrangements skills. After Call Work (ACW) is considered work time.

Universal Call Distribution - Least Occupied Agent (UCD-LOA), which selects the least occupied agent for a call, is used for the emergency skills and for the residential skills that are handled by newer agents.

Call selection

Queuing the emergency skill calls at top priority and other types of calls at medium priority results in any agent with emergency skills as primary to take the emergency call over the other type of call. Greatest Need is used for the call handling preference for agents, without Service Objective, so that calls are selected according to PWT. Call Selection Override is active for the emergency skill but not for the other skills. When the emergency skill is in overload, its need causes an override of typical call selection. This means that an agent who has the emergency skill as a reserve skill takes the emergency call rather than a primary call, such as a payment arrangement call.

Automated agent staffing

Service Level Supervisor is used to activate reserve agents when overload thresholds for a skill are exceeded. Activate on Oldest Call Waiting is administered to ensure that calls in the smaller, emergency skill receive the attention they need. Call Selection override is on for the emergency skill to ensure that the emergency calls are given priority over routine calls when the emergency skill is in overload.

Overload thresholds and service level targets

The following table shows the values for the current settings:

Skill	Overload thresholds	Service level targets
Emergency	Level 1: 5 seconds Level 2: 10 seconds	Not administered
Business accounts	Level 1: 20 seconds Level 2: 30 seconds	85% in 20
Residential accounts	Level 1: 40 seconds Level 2: 50 seconds	85% in 40
Payment arrangements	Not administered	Not administered

Where administered?

The following table shows where each of these features is administered through the switch. See Administering Business Advocate on Communication Manager on page 79 for procedures for administering the feature.

If you want to activate . . .	Then enter . . .	On the . . .
ACW Considered Idle?	**n** in the `ACW Considered Idle?` field	Feature-Related System Parameters form
Predicted Wait Time	**predicted-wait-time** in the `Call Selection Measurement` field	Feature-Related System Parameters form
Call Selection Override	**y** in the `Call Selection Override` field	Feature-Related System Parameters form
	y in the `Call Selection Override` field for the Emergency skill	Hunt Group form (page 2)
	n in the `Call Selection Override` field for the nonemergency skills	
Service Level Supervisor	**y** in the `Service Level Supervisor` field, except for the Payment Arrangements skill	Hunt Group form (page 2)
Activate on Oldest Call Waiting	**y** in the `Activate on Oldest Call Waiting` field for the emergency skill	Hunt Group form (page 2)
EAD-LOA and UCD-LOA	**ead-loa** in the `Group Type` field for the Business and Payment Arrangement skills, **ucd-loa** for the Emergency and Residential skills	Hunt Group form (page 1)
Overload Thresholds	Number of seconds in the `Level 1` and `Level 2 Threshold` fields for each skill, except for the Payment Arrangements skill	Hunt Group form (page 2)
Dynamic Threshold Adjustment	**y** in the `Dynamic Threshold Adjustment` field for nonemergency skills, except for the Payment Arrangements skill	Hunt Group form (page 2)

If you want to activate . . .	Then enter . . .	On the . . .
Service Level Target	% in seconds in the `Service Level Target` field for nonemergency skills, except for the Payment Arrangements skill	Hunt Group form (page 2)
Greatest Need	**greatest-need** in the `Call Handling Preference` field	Agent LoginID form
Skill Levels for Agents	skill levels in the `Skill Level (SL)` field for each agent's primary skill	Agent LoginID form
Reserve Agents	**1** or **2** in the `Reserve Level (RL)` fields for each agent's reserve skills, according to agent's profile	Agent LoginID form

Overload thresholds and service level targets

The following table shows how the overload thresholds and service level targets are set.

Skill	Overload thresholds	Service level targets
Emergency	Level 1: 5 seconds Level 2: 10 seconds	Not administered
Business accounts	Level 1: 20 seconds Level 2: 30 seconds	85% in 20
Residential accounts	Level 1: 40 seconds Level 2: 50 seconds	85% in 40
Payment arrangements	Not administered	80% in 60

Results

Call selection override, which is active for the emergency hunt group, helps to ensure that calls in this skill are answered quickly. When this skill exceeds its thresholds, agents are diverted from their primary skills to assist. Additionally, Activate on Oldest Call Waiting causes the wait time of the oldest call in queue for the emergency skill to be monitored every 5 seconds. If the wait time of the oldest call exceeds either the overload 1 or overload 2 levels, reserve agents become eligible. Since the call volumes of emergency skills tend to be fairly unpredictable, the normal Expected Wait Time trigger for reserves is less accurate and therefore less effective in activating reserves at the right times. With low thresholds and a check of the oldest call every 5 seconds, the activation of reserves is more reliable in this critical, but very unpredictable situation.

Dynamic Threshold Adjustment automatically adjusts thresholds to help maintain service levels for nonemergency skills. If, for example, there is an unusually high number of power outages being reported as a result of a storm, the thresholds for Residential Accounts may be lowered to engage reserves more quickly. Dynamic Threshold Adjustment will be off for emergency skills because these overloads should never be adjusted upward.

Measuring results

The following table shows some of the reports that you can review to determine the effectiveness of this solution.

If you want to check . . .	And determine . . .	Use this report
• % Within Service Level • Average Speed of Answer • Average ACD Time • Maximum delay	• Whether your service levels are being met for each skill. • How quickly calls are answered. • What the average talk time is for the skill. Note that if the Maximum Delay far exceeds the Overload 2 threshold for emergency skills, it is an indication that primary and reserve staffing is insufficient.	Real-Time Split/Skill Graphical Status report or Historical Split/Skill Graphical Service Level Report
Average Abandon Time	Whether your thresholds are set low enough to activate reserve agents before the call is abandoned.	Real-Time Split/Skill Graphical Status report
Overload Thresholds	Whether Dynamic Threshold Adjustment is making adjustments to thresholds as wanted. Note that you can also use the displayed threshold information (adjusted thresholds) to readminister your thresholds if you decide not to use Dynamic Threshold Adjustment.	`list skill-status` command (SAT command that the system administrator can use)
Activation of Reserve Agents	The number of calls being taken by reserve 1 or reserve 2 agents.	Custom Report

Controlling agent time in a skill

Some contact centers place special emphasis on providing a balanced mix of calls to each agent to develop agent abilities in new areas without overwhelming them, or to align agent contribution with their compensation or reward plan. For example, a business might choose to allot a percentage of an agent's time to serve skills for which he can earn commission, and a percentage for the time he spends serving noncommission skills. Percent Allocation, when used for agent and call selection, is designed to meet this need.

This solution includes:

● Auto Reserve Agents

● Dynamic Percentage Adjustment

● Percent Allocation as a call selection method

● Percent Allocation Distribution (PAD) for agent selection

This section includes the following topics:

Background information

A company that sells and services fax machines uses a Sales skill and a Service skill. Agents are trained to serve both skills, although five agents are particularly effective at closing sales. It is important to the company that customers are served well and also that agents have an equitable chance at serving commission and noncommission skills.

Agent assignments

The following table shows agent assignments.

Agents	Sales	Service
Top sales	Skill level 1 50%	Skill level 2 50%
All others	Skill level 1 50%	Skill level 1 50%

Notice that the high-performing sales agents have the Service skill at skill level 2, which works in conjunction with Auto Reserve for "secondary only". Since the other agents hold both the Sales and Service skills at skill level 1, they are not subject to Auto Reserving.

Agent selection

PAD is administered as the hunt group method for agent selection so that during conditions of agent surplus, agents are selected for calls using their administered target allocations. Agents are encouraged to complete all call-related work during the call, so After Call Work (ACW) is not considered work time.

Call selection

Percent Allocation is administered as the call selection method to ensure that during conditions of call surplus, calls are selected that meet the available agent's administered allocation plan. Auto Reserve Agents is set to **secondary-only** so that top-performing sales agents are left idle if their target allocation has been exceeded for the Service skill. This allows the top-performing agents to be available to serve additional incoming Sales calls, resulting in more revenue for the company. All other agents are not affected by the Auto Reserve Agents feature because they hold both the sales skill and the service skill at level 1.

Note:
When Auto Reserve Agents is set to **secondary-only**, the skill level that is assigned on the Agent LoginID form determines in which skills the agent is left idle.

Automated agent staffing

Dynamic Percentage Adjustment is administered to adjust target allocations as necessary to meet the company's service levels for each skill. If call volume is higher than expected on one skill or another, target allocations are adjusted so that service levels can be met for the skills.

Service level target

Service level targets are set as follows:

- Sales - 85% in 25 seconds
- Service - 80% in 40 seconds

Expected call handling time

Expected Call Handling Time, including talk time and ACW is set to 300 seconds for each skill.

Where administered?

The following table shows where each of these features is administered through the switch. See Administering Business Advocate on Communication Manager on page 79 for procedures for administering the feature.

If you want to activate . . .	Then enter . . .	On the . . .
ACW Considered Idle?	`y` in the `ACW Considered Idle?` field	Feature-Related System Parameters form
Auto Reserve Agents	`secondary-only` in the `Auto Reserve Agents` field	Feature-Related System Parameters form
PAD	`pad` in the `Group Type` field	Hunt Group form (page 1)
Expected Call Handling Time	`300` seconds in the `Expected Call Handling Time` field for each skill	Hunt Group form (page 2)

If you want to activate . . .	Then enter . . .	On the . . .
Dynamic Percentage Adjustment	`y` in the `Dynamic Percentage Adjustment` field for each skill	Hunt Group form (page 2)
Service Level Target	% in seconds in the `Service Level Target` fields for each skill	Hunt Group form (page 2)
Percent Allocation	**percent-allocation** in the `Call Handling Preference` field	Agent LoginID form
Percentages for skills	% to be allocated for each skill in the `Percent Allocation (PA)` field, according to the agent's profile	Agent LoginID form
Skill Levels for Agents	`1` or `2` in the `Skill Level (SL)` field, according to the agent's profile	Agent LoginID form

Results

Percentage Allocation and PAD work together to control agent time in skills during conditions of call or agent surplus. Both methods make their selections for calls or agents by comparing an agent's work time and target allocation for a skill. In this example, all agents are given the same target allocations: 50% for Sales and 50% percent for Service. To ensure that the top-performing agents will not be serving too many Service calls, Auto Reserve Agents is activated as **secondary-only**. By administering the feature in this way, the system temporarily leaves a top-performing agent idle when only a Service call is waiting and the available top performing agent has exceeded the adjusted work time for Service calls. Allocations for all agents, however, are still adjusted as needed to maintain service levels. As a result of administering this combination of Percentage Allocation features, the company should see service levels that are close to their defined targets as well as actual agent work time that is near the target allocations because the company maintaining closer control over where agents spend their work time.

Measuring results

The following table shows some of the reports that you can review to determine the effectiveness of this solution.

If you want to check . . .	And determine . . .	Use this report
● % Within Service Level ● Average speed of answer ● Average ACD Time	● Whether your service levels are being met for each skill. ● How quickly calls are being answered. ● What the average talk time is for the skill.	Real-Time Split/Skill Graphical Status report or Historical Split/Skill Graphical Service Level Report
Staffing	Whether the skill is staffed appropriately.	Split/Skill Graphical Average Position Staffed Report

Administering Business Advocate on Communication Manager

This section provides details on administering Business Advocate through the switch software.

This section following topics:

- Requirements for setting up Business Advocate on page 79
- Administration procedures on page 91

Requirements for setting up Business Advocate

This section is designed to introduce you to the requirements for administering Business Advocate features.

This section includes the following topics:

- System requirements on page 80
- Communication Manager or CMS Supervisor? on page 80
- Business Advocate decisions at a glance on page 81
- System-level decisions on page 83
- VDN-level decisions on page 84
- Skill-level decisions on page 85
- Agent-level decisions on page 89

System requirements

The following are the minimum system requirements for using Business Advocate features:

- G3V6 for Business Advocate
- G3V9 for Dynamic Advocate
- Expert Agent Selection (EAS)
- Avaya Call Management System (CMS) R3V6 or higher (if you are using CMS for reporting)

Communication Manager or CMS Supervisor?

Business Advocate administration can be performed through Communication Manager, or through CMS Supervisor or Avaya CMS. There are some tasks that can only be performed only through the switch. It is important to note that CMS Supervisor administration can be performed only for existing agent login IDs.

The following table shows which tasks must be completed through the switch and which can be completed through CMS Supervisor or Avaya CMS. This section includes only those procedures for the tasks that are performed through the switch. See Administering Business Advocate through CMS Supervisor on page 123 for procedures to administer through CMS Supervisor, or see the appropriate version of the Avaya CMS Administration, document for administering through CMS.

Task	Communication Manager	CMS Supervisor or CMS
Create hunt groups	X	
Create login IDs	X	
Administer call selection measurement (Current Wait Time and Predicted Wait Time)	X	
Administer group types (agent selection methods: EAD-MIA, UCD-MIA, UCD-LOA, EAD-LOA, PAD)	X	
Administer call handling preferences (call selection methods: Greatest Need, Skill Level, Percent Allocation)	X	X (existing login IDs)
Activate Service Objective by agent	X	X (existing login IDs)
Administer Service Objective value by skill	X	

Task	Communication Manager	CMS Supervisor or CMS
Administer Dynamic Queue Position (Service Objective by VDN, including Service Level Targets)	X	
Administer Service Level Supervisor (including thresholds, Call Selection Override, Activate on Oldest Call Waiting, Dynamic Threshold Adjustment, and Service Level Targets)	X	
Determine whether to use After Call Work (ACW) in LOA calculation	X	
Review or change agent skills	X	X (existing login IDs)
Add or delete skills per agent	X	X (existing login IDs)
Assign reserve agents	X	X (existing login IDs)

Business Advocate decisions at a glance

You need to make several decisions about how to implement Business Advocate. Some of these decisions affect your contact center system wide, while others affect particular Vector Directory Numbers (VDNs), skills, or agents. The following table lists the features that are available with Business Advocate and Dynamic Advocate, the level of impact for implementing those features, and where the features are administered on the switch.

Feature	Decision level	Where administered
Least Occupied Agent:		
● LOA (Group Type)	Skill	Hunt Group form
● ACW Considered Idle?	System	Feature-Related System Parameters form
Percent Allocation:		
● Percent Allocation (call handling preference)	Agent	Agent LoginID form
● PAD (group type)	Skill	Hunt Group form
● Expected Call Handling Time	Skill	Hunt Group form

Feature	Decision level	Where administered
● Dynamic Percentage Adjustment	Skill	Hunt Group form
● Service Level Target	Skill	Hunt Group form
● ACW Considered Idle?	System	Feature-Related System Parameters form
● Auto Reserve Agents	System	Feature-Related System Parameters form
Dynamic Queue Position:		
● Dynamic Queue Position	Skill	Hunt Group form
● Service Objective	VDN	Vector Directory Number form
Service Objective:		
● Service Objective (activate for agent)	Agent	Agent LoginID form
● Service Objective (set target objective)	Skill	Hunt Group form
● Call Selection Measurement (CWT or PWT)	System	Feature-Related System Parameters form
Service Level Supervisor:		
● Service Level Supervisor (administer for skill)	Skill	Hunt Group form
● Activate on Oldest Call Waiting	Skill	Hunt Group form
● Call Selection Override	System Skill	Feature-Related System Parameters form Hunt Group form
● Overload Thresholds	Skill	Hunt Group form
● Dynamic Threshold Adjustment	Skill	Hunt Group form
● Service Level Target	Skill	Hunt Group form
● Reserve Agents	Agent	Agent LoginID form
Predicted Wait Time (PWT)	System	Feature-Related System Parameters form

Feature	Decision level	Where administered
Call Handling Preference (call selection method: Greatest Need, Skill Level, Percent Allocation)	Agent	Agent LoginID form
Group Type (agent selection method: UCD-MIA, EAD-MIA, UCD-LOA, EAD-LOA, PAD)	Skill	Hunt Group form

System-level decisions

System-level decisions are made on the Feature-Related System Parameters form. These high-level decisions, unlike the skill-level or agent-level decisions you make, affect the overall operation of your contact center.

This section includes the following topics:

- MIA Across Splits or Skills on page 83
- After Call Work Considered idle? on page 83
- Call Selection Measurement on page 84
- Service Level Supervisor Call Selection Override on page 84
- Auto Reserve Agents on page 84

MIA Across Splits or Skills

MIA Across Splits or Skills? y (yes) or n (no) - All Business Advocate and Dynamic Advocate features apply across skills. This is true for Universal Call Distribution-Least Occupied Agent (UCD-LOA), Expert Agent Distribution-Least Occupied Agent (EAD-LOA), and Percent Allocation Distribution (PAD). Changes to the field affect only pre-Advocate agent selection features, which include Universal Call Distribution-Most Idle Agent (UCD-MIA) and Expert Agent Distribution - Most Idle Agent (EAD-MIA).

After Call Work Considered idle?

After Call Work (ACW) Considered Idle? y (yes) or n (no) - The `After Call Work?` field determines whether the switch includes after call work in work time when deciding which agent will receive the next call. You enter `n` if you want to include the agent's ACW in work time. You enter `y` if you do not want to include the agent's ACW in work time.

Call Selection Measurement

Call Selection Measurement: predicted-wait-time or current-wait-time - The `Call Selection Measurement:` field applies only if you are using Greatest Need or Skill Level (not Percent Allocation) as a call selection method. **`Predicted-wait-time`** is the recommended entry because it results in fewer calls with exceedingly long wait times and optimizes critical agent skill resources. It predicts how long a call will have to wait if the currently available agent does not answer the call. An entry of **`current-wait-time`** selects calls based on their current wait time in queue.

Service Level Supervisor Call Selection Override

Service Level Supervisor Call Selection Override? y (yes) or n (no) - Call Selection Override works in conjunction with Service Level Supervisor to determine how calls are selected for agents when overload thresholds are exceeded. When this feature is administered, calls are selected from skills that are over threshold to the exclusion of skills that are under threshold. Additionally, calls that have exceeded the level 2 threshold are selected to the exclusion of calls that have exceeded the level 1 threshold.

This feature is administered at both the system level and skill level. While it must be activated separately for each skill (using the Hunt Group form), it can be turned on and off system wide through the `Service Level Supervisor Call Selection Override?` field on the System-Parameters Features form. This eliminates the need to turn it off for each individual skill. The default for this field on the Feature-Related System Parameters form is **`y`**, which enables the feature.

Auto Reserve Agents

Auto Reserve Agents: none, all, or secondary-only - The Auto Reserve Agents enhancement provides the ability to leave an agent idle even when one or more calls are in queue for one or more of the agent's assigned skills. This decision is made using a comparison of the agent's work time in the skill and the agent's target allocation for the skill.

The default for this field is **`none`**. If **`all`** is entered, the agent is left idle if the agent's work time in that skill exceeds the agent's target allocation for that skill. If **`secondary-only`** is entered, this feature applies only to the agent's nonprimary skills (skill levels 2 to 16).

VDN-level decisions

Dynamic Queue Position allows you to queue calls from multiple Vector Directory Numbers (VDNs) to a single skill, while maintaining different service objectives for those VDNs. The decision to administer this enhancement is made using the VDN form and the Hunt Group form.

Service Objective: (sec) - The `Service Objective(sec):` field on page 1 of the VDN form is used for setting service objectives by VDN. The entry for this field is the service level, in seconds, that you want to achieve for the VDN. The default value for this field is `20` seconds.

> **Note:**
> The `Service Objective (sec):` field is displayed only if the Dynamic Advocate customer option has been activated using the System-Parameters Customer-Options form.

Skill-level decisions

Skill-level decisions are those that you make for individual skills within an organization, using the Hunt Group form. When making these decisions, you determine how agents will be selected for calls in agent surplus situations, set any service objectives for skills, and administer specific overload thresholds if you are using Service Level Supervisor. If you are using Service Level Supervisor, you also determine whether Business Advocate will automate threshold adjustments through the Dynamic Threshold Adjustment feature. If you are using Percent Allocation as a call selection method, you also decide whether to activate Dynamic Percentage Adjustment, and you set related service level targets.

> **Note:**
> The fields and features are presented in the order in which they are displayed on the Hunt Group form.

This section includes the following topics:

Group Type (Agent Selection method)

Group Type: EAD-MIA, EAD-LOA, UCD-MIA, UCD-LOA, PAD - The `Group Type:` field is displayed on page 1 of the Hunt Group form. This field is used to determine the type of selection method that you want to use in an agent surplus condition for the skill. Selection methods (and acceptable field entries) include `ead-mia, ead-loa, ucd-mia, ucd-loa,` and `pad`. The default for this field is `ucd-mia`.

Expected Call Handling Time

Expected Call Handling Time (sec) - The `Expected Call Handling Time(sec):` field on page 2 of the Hunt Group form is used to initialize the calculations for Expected Wait Time (EWT) and Percent Allocation. This setting, which you must administer for each skill when Business Advocate is first set up, is the average call handling time for this skill. This includes talk time and after call work (ACW), if ACW is being counted as work time.

> **Note:**
> If your average call handling time changes significantly over a period of time, you will want to adjust this field to more closely match the actual call handling time. Such adjustments will allow the Percent Allocation feature to work most effectively.

Service Objective

Service Objective: (sec) - The `Service Objective(sec):` field (on page 2 of the Hunt Group form) is used to administer a specific service objective for a skill (and is used in place of the original `Acceptable Service Level(sec):` field, which is now used only for BCMS and VuStats). The entry for this field is the number of seconds in which you want the call to be answered. The default value is `20`.

> **Note:**
> This field is displayed only if the Business Advocate customer option is set on the System-Parameters Customer-Options form.

Service Level Supervisor

Service Level Supervisor? y (yes) or n (no) - The `Service Level Supervisor?` field on page 2 of the Hunt Group form determines whether you use reserve agents or call selection override when a skill goes over a predetermined threshold. If `y` is entered, reserve agents may be engaged to help the skill and call selection may (optionally) include call selection override. If `n` is entered, reserve agents will not be engaged and call selection override cannot be administered. The default for this field is `n`.

> **Note:**
> The overload thresholds for Service Level Supervisor are set using the `Level 1 Threshold(sec):` and `Level 2 Threshold(sec):` fields on the Hunt Group form.

Activate on Oldest Call Waiting

Activate on Oldest Call Waiting? y (yes) or n (no) - The `Activate on Oldest Call Waiting?` field on page 2 of the Hunt Group form provides the option to use time in queue in addition to Expected Wait Time (EWT) for activating reserve agents with Service Level Supervisor. Service Level Supervisor uses only EWT unless you enter `y` in this field. If you decide to activate reserves using time in queue, you must administer it for each skill that uses Service Level Supervisor.

Call Selection Override

Call Selection Override requires activation at both the system level and hunt group level:

● Administration at the system level involves entering a `y` or `n` in the `Service Level Supervisor Call Selection Override?` field on the System-Parameters Features form.

● Administration at the skill level involves entering a `y` or `n` in the `Call Selection Override?` field on page 2 of the Hunt Group form.

The feature must be administered separately for each skill for which you want to use the feature.

Overload thresholds

Level 1 Threshold (sec), Level 2 Threshold (sec) - The `Level 1 Threshold (sec):` and `Level 2 Threshold (sec):` fields are used with Service Level Supervisor to determine when reserve agents are activated or when call selection override occurs (if Call Selection Override has been turned on).

You can set one or two levels:

● Agents who are reserve level 1 are activated when the skill reaches the level 1 threshold.

● Agents who are reserve level 2 are activated when the skill reaches the level 2 threshold.

Dynamic Threshold Adjustment

Dynamic Threshold Adjustment? y (yes) or n (no) - The `Dynamic Threshold Adjustment?` field on the Hunt Group form is used to enable the automatic adjustment of overload thresholds to meet predefined service levels. An entry of `y` enables the feature to work with Service Level Supervisor. The default value for this field is `n`.

The predefined service level targets are set using the `Service Level Target:` field, which is described separately.

> **Note:**
> The `Dynamic Threshold Adjustment?` field is displayed only if you enter **y** in the `Service Level Supervisor?` field and the Dynamic Advocate customer option is set on the System-Parameters Customer-Options form.

Dynamic Percentage Adjustment

Dynamic Percentage Adjustment? y (yes) or n (no) - The `Dynamic Percentage Adjustment?` field on the Hunt Group form is used to enable the Dynamic Percentage Adjustment enhancement. If set to `y`, Advocate automatically adjusts an agent's target allocations according to the level of service that is being achieved for the agent's assigned skills and the predefined service levels for those skills. This field is only used only if you are using Percentage Allocation Distribution (PAD), Universal Call Distribution-Least Occupied Agent (UCD-LOA), or Expert Agent Distribution-Least Occupied Agent (EAD-LOA) as an agent selection method. The default value for this field is `n`.

The predefined service level targets are administered using the `Service Level Target` field of the Hunt Group form, which is described separately.

> **Note:**
> The `Dynamic Percentage Adjustment?` field is displayed only if you enter **pad, ucd-loa,** or **ead-loa** in the `Group Type` field on the Hunt Group form and if the Dynamic Advocate option is set on the System-Parameters Customer-Options form.

Service level target

Service Level Target: x (%) in y (secs) - The `Service Level Target:` field on page 2 of the Hunt Group form is used to set a specific service level target, that is, to a percentage of calls that are answered in a specific number of seconds for a skill. The defaults are `80` (percent) in `20` (seconds).

This field is used with Dynamic Threshold Adjustment if you are using Service Level Supervisor or Dynamic Percentage Adjustment if you are using Percent Allocation. When Dynamic Threshold Adjustment is in use, the actual performance for a skill is compared to the service level target to determine if the overload thresholds should be adjusted up or down. When Dynamic Percentage Adjustment is in use, the performance for a skill is compared to the service level target to determine if the target allocations should be adjusted up or down.

> **Note:**
> The `Service Level Target:` field is displayed only if you enter `y` in the `Dynamic Adjustment Threshold?` or `Dynamic Percentage Adjustment?` field on the Hunt Group form and the Dynamic Advocate customer option is set on the System-Parameters Customer-Options form.

Dynamic Queue Position

Dynamic Queue Position? y (yes) or n (no) - The `Dynamic Queue Position?` field on page 2 of the Hunt Group form is used to activate this feature. Enter `y` to allow calls to queue from various VDNs, each with separate service objectives, to a single skill. The default value for this field is `n`.

> **Note:**
> The `Dynamic Queue Position?` field is displayed only if the Dynamic Advocate customer option is set on the System-Parameters Customer-Options form.

Agent-level decisions

Agent-level decisions are those that are determined on the Agent LoginID form. These include call handling preferences for an individual agent, the determination of whether Service Objective is in use for the agent's skills, and the administration of any reserve skills for the agent.

This section includes the following topics:

- Call Handling Preference (call selection method) on page 89
- Service Objective on page 89
- Direct Agent Calls First on page 89
- Reserve Levels on page 90
- Percent Allocation on page 90

Call Handling Preference (call selection method)

Call Handling Preference: greatest-need, skill-level, or percent-allocation - The `Call Handling Preference:` field is used to determine the call selection method that is used to select a call during a call surplus condition. Options include **`greatest-need,`** **`skill-level,`** or **`percent-allocation`**. Skill levels (1 to 16) or reserve levels (1 or 2) must be entered for each of an agent's assigned skills. If you select **`percent-allocation`**, you must also enter a target allocation (as a percent) for each of the agent's non-reserve skills.

Service Objective

Service Objective? y (yes) or n (no) - The `Service Objective?` field is used to activate the Service Objective feature for an agent. This means that when the agent becomes available in a call surplus situation, service objectives are part of the call selection process. This feature works only with Greatest Need or Skill Level; it cannot be administered if the call handling preference is Percent Allocation. You enter **`y`** to activate the feature. See Service Objective on page 86 for information about administering this feature at the skill level.

Direct Agent Calls First

Direct Agent Calls First? y (yes) or n (no) - The `Direct Agent Calls First?` field is used to select calls from a Direct Agent skill first. When set to **`y`**, calls from a Direct Agent skill are selected before calls from any other skills, including skills that are over threshold.

Reserve Levels

RL (Reserve Level) - The `RL (Reserve Level)` fields on the Agent LoginID form are used to administer an agent as a reserve agent for a skill or group of skills. Two entries are possible for this field, each of which indicates the threshold at which the agent is activated as a reserve agent. An entry of `1` indicates that the agent is activated at the level 1 threshold for that skill. An entry of `2` indicates that the agent is activated at the level 2 threshold for the skill.

> **Note:**
> If a reserve level is entered for a skill, no skill level (SL) entry is allowed for that skill on the Agent LoginID form.

Percent Allocation

When you use **percent-allocation** as a call handling preference, you must enter a target percentage for each of the agent's assigned nonreserve skills in the `PA` field. The total of all target percentages must equal 100%. Target allocations are not allowed for reserve skills.

> **Note:**
> The `PA` field is displayed only when **percent-allocation** is entered in the `Call Handling Preference:` field. Additionally, the `Direct Agent Calls First?` field replaces the `Service Objective?` field when this preference is set.

Administration procedures

This section contains procedures for administering Call Selection, Agent Selection, Automated Agent Staffing, And Dynamic Advocate features. See Overview of Business Advocate on page 13 for detailed information on how these features work.

This section includes the following topics:

- Administering Least Occupied Agent on page 91
- Administering Most Idle Agent on page 92
- Administering Greatest Need on page 93
- Administering Skill Level on page 94
- Administering Percent Allocation for call and agent selection on page 95
- Administering Service Objective on page 98
- Administering Predicted Wait Time or Current Wait Time on page 100
- Administering Dynamic Queue Position on page 100
- Administering Service Level Supervisor on page 103

Administering Least Occupied Agent

Least Occupied Agent (LOA) is an agent selection method that bases agent selection on the agent's occupancy rather than idle time in queue. There are two options for administering this feature: Expert Agent Distribution-Least Occupied Agent (EAD-LOA) or Universal Call Distribution-Least Occupied Agent (UCD-LOA). EAD-LOA selects the highest skill level, least occupied agent in the skill to take the incoming call. UCD-LOA selects the least occupied agent in the skill, regardless of skill level, to take the call. For more details about how these methods work, see Selecting agents on page 32.

This section includes the following topics:

- Where is LOA administered? on page 91
- How to administer LOA on page 92

Where is LOA administered?

Agent selection is administered on page 1 of the Hunt Group form.

How to administer LOA

To administer LOA as an agent selection method:

1. At the command line prompt of your SAT or terminal emulator, enter:

   change hunt-group *xxx*

   where ***xxx*** is the number of the skill you want to change.

2. Press **Return**.

3. In the `Group Type:` field of the Hunt Group form, enter one of the following agent selection options:

   - **ucd-loa**
   - **ead-loa**

4. Press **Enter** to save your changes.

Administering Most Idle Agent

Most Idle Agent (MIA) is an agent selection method that bases agent selection on the agent's idle time in queue. There are two options for administering this feature: Expert Agent Distribution-Most Idle Agent (EAD-MIA) or Universal Call Distribution-Most Idle Agent (UCD-MIA). EAD-MIA selects the highest skill level, most idle agent in the skill to take the incoming call. UCD-MIA selects the most idle agent in the skill, regardless of skill level, to take the call. For more details about how these methods work, see Selecting agents on page 32.

This section includes the following topics:

- Where is MIA administered? on page 92
- How to administer MIA on page 92

Where is MIA administered?

Agent selection is administered on page 1 of the Hunt Group form.

How to administer MIA

To administer MIA as an agent selection method:

1. At the command line prompt of your SAT or terminal emulator, enter:

   change hunt-group *xxx*

   where ***xxx*** is the number of the skill you want to change.

2. Press **Return**.

3. In the `Group Type:` field of the Hunt Group form, enter one of the following agent selection options:

   ● **ucd-mia**

   ● **ead-mia**

4. Press **Enter** to save your changes.

Administering Greatest Need

Greatest Need is a call selection method that selects a skill for an agent to serve based on the call at the highest priority whose Predicted Wait Time (PWT) or Current Wait Time (CWT) for a skill is the longest, or whose PWT or CWT is the highest relative to the administered service objective. See Selecting calls on page 21 for more information about how Greatest Need works.

This section includes the following topics:

● Where is Greatest Need administered? on page 93

● How to administer Greatest Need on page 93

Where is Greatest Need administered?

Initial administration for Greatest Need is completed on the Agent LoginID form. Changes involving existing agent login IDs can be made through CMS Supervisor or Avaya Call Management System (CMS). See Administering Business Advocate through CMS Supervisor on page 123 or the appropriate version of the Avaya CMS Administration document, for more information about agent administration for existing login IDs.

How to administer Greatest Need

To administer Greatest Need as a call handling preference for an agent:

1. At the command line prompt, enter:

   change agent-loginID *xxxxx*

   where *xxxxx* is the loginID for the agent whose assignment you want to administer.

2. Press **Return**.

3. In the Call Handling Preference field, enter:

   greatest-need

Note:
> Optional: If you will use Service Objective with Greatest Need, enter `y` in the `Service Objective?` field to activate Service Objective for this agent.
>
> See Administering Service Objective on page 98 for additional administrative tasks that are required for using Service Objective.

4. Enter a skill number in the `SN` field for each of the agent's assigned skills.

5. In the `SL` field for each of an agent's assigned skills, enter a skill level of 1 to 16, or enter a reserve level of 1 or 2 in the `RL` field.

   See Administering Service Level Supervisor on page 103 for details on assigning reserve agents.

6. Press **Enter** to save your changes.

Administering Skill Level

Skill Level is a call selection method that selects calls based on the agent's expertise in one or more areas. Skill Level selects a call for an agent based on highest skill level, highest priority, and time in queue. Up to 16 skill levels can be used; however, Business Advocate's predictive value is greater if multiple skills are assigned at similar levels. See Selecting calls on page 21 for more details about how Skill Level works.

This section includes the following topics:

- Where is Skill Level administered? on page 94
- How to administer Skill Level on page 94

Where is Skill Level administered?

Initial administration for Skill Level is completed using the Agent LoginID form. Changes involving existing agent login IDs can be made through CMS Supervisor or Avaya Call Management System (CMS). See Administering Business Advocate through CMS Supervisor on page 123 or the appropriate version of the Avaya CMS Administration document, for more information about agent administration for existing login IDs.

How to administer Skill Level

To administer Skill Level as a call handling preference for an agent:

1. At the command line prompt, enter:

   change agent-loginID *xxxxx*

   where *xxxxx* is the loginID for the agent whose assignment you want to administer.

2. Press **Return**.

3. In the Call Handling Preference field, enter:

skill-level

Note:
Optional: If you will use Service Objective with Skill Level, enter **y** in the `Service Objective?` field to activate Service Objective for this agent's assigned skills.

See Administering Service Objective on page 98 for additional administrative tasks that are required for using Service Objective

4. Enter a skill number in the `SN` field for each of the agent's assigned skills.

5. In the `SL` field for each of an agent's assigned skills, enter a skill level of 1 to16, or type a reserve level of 1 or 2 in the `RL` field.

See Administering Service Level Supervisor on page 103 for details on assigning reserve agents.

6. Press **Enter** to save your changes.

Administering Percent Allocation for call and agent selection

This feature allows you to administer Percent Allocation for agent selection, and call selection. The feature also includes the ability to automatically adjust agents' target allocations to help meet predefined service level targets (Dynamic Percentage Adjustment) and the ability to leave an agent idle in a skill when the agent's work time in that skill exceeds the agent's target allocations (Auto Reserve Agents).

This section includes the following topics:

- Getting the best results with Percent Allocation on page 95
- Where is Percent Allocation administered? on page 96
- How to administer Percent Allocation for an agent on page 96
- How to administer PAD and Dynamic Percentage Adjustment for a skill on page 97
- How to administer Auto Reserve Agents at the system level on page 98

Getting the best results with Percent Allocation

To take full advantage of the Percent Allocation features, it is recommended that you use all related features together. These include Percent Allocation as a call selection method, PAD as an agent selection method, Auto Reserve Agents, and Dynamic Percentage Adjustment. When used together, these features provide Advocate with the greatest degree of flexibility in using agents to meet your contact center's service level goals.

If you administer Percent Allocation for an agent, it is recommended that you administer PAD for all of that agent's skills. Additionally, when using PAD as an agent selection method for a skill, you should administer Percent Allocation as the call handling preference for all agents in the skill to meet your contact center's service level goals.

Where is Percent Allocation administered?

The administration tasks for the Percent Allocation features require the use of the Agent LoginID form, the Hunt Group form, and the System-Parameters Features form. For ease of reference, the procedures are presented from the lowest to highest levels of administration. They begin at the agent level, where call selection is administered. From there, they move on to the skill level, where the agent selection method and Dynamic Percentage Adjustment are activated. They finish at the system level, where Auto Reserve Agents is activated. Related decisions are presented at each level.

How to administer Percent Allocation for an agent

To administer Percent Allocation as a call selection method:

1. At the command line prompt, enter:

   change agent-loginID *xxxxx*

   where *xxxxx* is the loginID for the agent whose assignment you want to administer.

2. Press **Return**.

3. In the `Call Handling Preference:` field, enter:

   percent-allocation

   Note:
   When you type **percent-allocation** as the agent's call handling preference, the `Direct Agent Calls First?` field replaces the `Service Objective?` field.

4. In the `Direct Agent Calls First?` field, take one of the following actions:

   - Enter **y** if you want the agent to receive Direct Agent calls before all other ACD calls. Direct Agent calls now override the call selection method.

   - Enter **n** if you want to treat Direct Agent calls just like other calls and answer them only when there is a best percentage match. Percent Allocation now controls the selection of Direct Agent calls just as it controls the selection of other ACD calls.

5. Enter a skill number in the `SN` field for each of the agent's assigned skills.

6. Enter a skill level of 1 to 16 in the `SL` field for each of the agent's assigned skills.

7. Enter a reserve level of 1 or 2 in the `RL` field for each of the agent's assigned reserve skills.

8. Enter a percentage from 1 to 100 in the `PA` field for the agent's first standard skill.

9. Repeat Step 6 for each of the agent's remaining skills.

    Note:
    Do not enter target percentages for an agent's reserve skills.

10. Check that assigned percentages total 100%.

11. Press **Enter** to save your changes.

How to administer PAD and Dynamic Percentage Adjustment for a skill

To administer PAD and Dynamic Percentage Adjustment for a skill:

1. At the command line prompt of your SAT or terminal emulator, enter:

   `change hunt-group xxx`

   where `xxx` is the number of the skill you want to change.

2. Press **Return**.

3. In the `Group Type` field of the `Hunt Group` form, enter:

   `pad`

   Note:
   If you want to use Least Occupied Agent (LOA) as the agent selection method in the `Group Type` field, choose one of the following actions:

   - Enter `ucd-loa` to administer Universal Call Distribution-Least Occupied Agent

   - Enter `ead-loa` to administer Expert Agent Distribution-Least Occupied Agent

4. Go to page 2 of the Hunt Group form.

5. In the `Expected Call Handling Time(sec):` field, enter the average call handling time in seconds that you expect for this skill. Include talk time and after call work (ACW), if you plan to administer ACW as work time on the System-Parameters Features form.

6. Enter `y` in the `Dynamic Percentage Adjustment?` field.

   Note:
   This field is displayed only if you entered `pad, ucd-loa,` or `ead-loa` in the `Group Type:` field on page 1 of the Hunt Group form.

7. In the `Service Level Target:` field, enter the service level you want to achieve for this skill by typing a percentage in the first field and a number of seconds in the next field.

8. Press **Enter** to save your changes.

How to administer Auto Reserve Agents at the system level

To administer Auto Reserve Agents and make related decisions at the system level:

1. At the command line prompt of your SAT or terminal emulator, enter:

   change system-parameters features

2. Press **Return**.

3. Go to page 9 of the System-Parameters Features form.

4. In the `ACW Agents Considered Idle?` field, choose one of the following actions:

   ● If you do *not* want ACW to be included in the agent's work time in a skill, enter: **y**

   ● If you do want ACW to be included in the agent's work time in a skill, enter: **n**

   Note:
   When administering other Business Advocate features, the `Call Selection Measurement:` field is used to determine whether Current Wait Time or Predicted Wait Time is used for call selection. This field does not apply for Percent Allocation, so you can leave this field at the default value.

5. In the Auto Reserve Agents field, choose one of the following actions:

   ● Type **all** so that an agent will be left idle in a skill if her work time in that skill has exceeded her target allocation.

   ● Type **secondary-only** to activate this feature only for the agent's nonprimary skills (skill levels 2 to 16)

6. Press **Enter** to save your changes.

Administering Service Objective

Service Objective is a feature that can be used with either the Greatest Need or Skill Level call handling preferences. When Service Objective is enabled, Communication Manager selects calls for agents according to the ratio of Predicted Wait Time (PWT) or Current Wait Time (CWT) and the administered service objective for each of an agent's assigned skills. Setting a more aggressive service objective for more important skills allows you to improve the average speed of answer (ASA) for those skills as compared to less important skills that are served by the same agents.

Note:
Service Objective does not work with Percent Allocation.

This section includes the following topics:

Before you start

When administering Service Objective for a skill, use the Agent LoginID form to activate the feature for each agent, the Hunt Group form to administer the service objective for each skill, and the Feature-Related System Parameters Features form to select the call selection measurement (CWT or PWT). This section includes procedures for each of those tasks. See Administering Dynamic Queue Position on page 100 for the steps required to administer service objectives for VDNs.

How to administer Service Objective for an agent

To administer Service Objective for an agent so that service objectives are incorporated into the call selection process for the agent:

1. At the command line prompt, enter:

   change agent-loginID *xxxxx*

   where *xxxxx* is the loginID for the agent whose assignment you want to administer.

2. Press **Return**.

3. Enter **greatest-need** or **skill-level** in the Call Handling Preference: field.

4. Enter **y** in the Service Objective? field to activate Service Objective for this agent.

   Note:
   The Service Objective? field is displayed only if Greatest Need or Skill Level is entered as the agent's call selection method.

5. Enter a skill number in the SN field for each of an agent's assigned skills.

6. Enter a skill level of 1 to 16 in the SL field for each of the agent's assigned skills.

7. Enter a reserve level of 1 or 2 in the RL field for each of the agents's assigned reserve skills.

8. Press **Enter** to save your changes.

How to administer Service Objective for a skill

To administer Service Objective for a skill:

1. At the command line prompt of your SAT or terminal emulator, enter:

   change hunt-group *xxx*

   where *xxx* is the number of the skill for which you want to activate Service Objective.

2. Press **Return**.

3. Go to page 2 of the Hunt Group form.

4. In the `Service Objective(sec):` field, enter your service objective target in seconds.

5. Press **Enter** to save your changes.

> **Note:**
> Before Release 9, Service Objectives were entered in the `Acceptable Service Level(sec):` field of this form.

Administering Predicted Wait Time or Current Wait Time

Call selection uses Predicted Wait Time (PWT) or Current Wait Time (CWT) to select calls or uses a ratio of PWT to Service Objective or CWT to Service Objective, depending on the call selection measurement that is being used and whether Service Objective is activated for the available agent.

To administer PWT or CWT to help determine how calls are selected:

1. At the command line prompt of your SAT or terminal emulator, enter:

   change system-parameters features

2. Press **Return**.

3. Go to page 9 of the `System-Parameters Features` form.

4. In the `Call Selection Measurement:` field, enter:

   predicted-wait-time

   current-wait-time

Administering Dynamic Queue Position

The Dynamic Queue Position feature allows you to queue calls from multiple Vector Directory Numbers (VDNs) to a single skill, while maintaining different service objectives for those VDNs. Dynamic Queue Position makes it simpler to serve a segmented customer base without adding additional skills.

The following figure shows how Dynamic Queue Position can be used to queue calls from three VDNs with different service objectives, into the Sales skill:
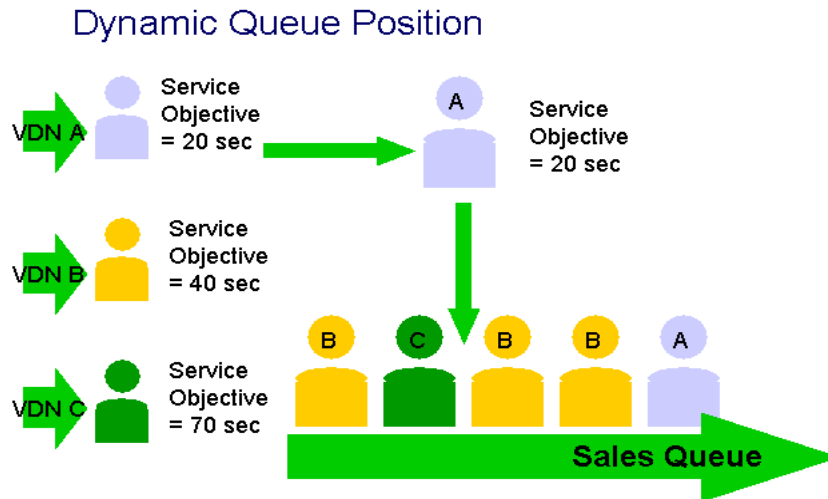
The `Service Objective (sec):` field is used to control call selection while the `Acceptable Service Level(sec):` field is used only for measuring percent in service level.

This section includes the following topics:

- Who is Dynamic Queue Position designed for? on page 101
- How does Dynamic Queue Position work? on page 102
- How does the Service Objective field work? on page 102
- Where is Dynamic Queue Position administered? on page 102
- How to administer Dynamic Queue Position on page 103
- How to administer a Service Objective for a VDN on page 103

Who is Dynamic Queue Position designed for?

Dynamic Queue Position is valuable for customers who want to support customer segmentation.

If your contact center uses VuStats or BCMS for contact center reporting, you will benefit from the Service Objective field.

How does Dynamic Queue Position work?

Calls from any number of VDNs can be queued to a single skill based on the assigned objective of the originating VDN and the estimated wait time of new calls and queued calls.

Consider, for example, a business that receives customer service calls from a wide range of customers and wants to support differentiation in how it handles calls from customers with different service policies. Since each agent is handling all types of customers now, a single skill can suffice. However, differentiation is needed in terms of how quickly calls are handled. This is accomplished by assigning a different service objective to the VDNs that correspond to the varying sets of customers:

- The service objective for customers with the most valuable policies is assigned a service objective of 10 seconds.

- The service objective for customers with midrange policies are set at 20 and 25 seconds.

- The service objective for customers without policies is set at 40 seconds.

The result is that the Average Speed of Answer (ASA) for the calls from each VDN is roughly proportional to the service objectives of the VDNs. Customers with the most valuable policies will tend to be placed in front of some of the other calls, but will not necessarily be placed in front of all of them. This arrangement lets the center continue to operate with a single skill defined, forecasted, and staffed. This arrangement also prevents the problems that result from queuing calls at different priority levels within the same queue.

See Administering Dynamic Queue Position on page 100 for information about setting up this feature.

How does the Service Objective field work?

The separate `Service Objective (sec):` field is used to control call selection by service objective. This frees up the `Acceptable Service Level(sec):` field for measuring only percent of service level. See Administering Service Objective on page 98 for information about using this field.

Where is Dynamic Queue Position administered?

Dynamic Queue Position is activated per skill on page 2 of the Hunt Group form. Service objectives are set for VDNs using the Vector Directory Number form of the switch. Note that the `Service Objective` fields on the Hunt Group form and the Agent LoginID form are not used when administering Dynamic Queue Position.

How to administer Dynamic Queue Position

To administer Dynamic Queue Position:

1. At the command line prompt of your SAT or terminal emulator, enter:

   change hunt-group *xxx*

   where *xxx* is the number of the skill to which calls will be queued.

2. Press **Return**.

3. Go to page 2 of the Hunt Group form.

4. Enter **y** in the `Dynamic Queue Position?` field.

5. Press **Enter** to save your changes.

How to administer a Service Objective for a VDN

To administer a service objective for a VDN:

1. At the command line prompt of your SAT or terminal emulator, enter:

   change vdn *xxxx*

   where *xxxx* is the number of the VDN for which you want to activate Dynamic Queue Position.

2. Press **Return**.

3. In the `Service Objective(sec):` field, enter your target objective in seconds.

4. Press **Enter** to save your changes.

Administering Service Level Supervisor

Service Level Supervisor automatically manages agents during periods of peak loads by activating reserve agents or activating Call Selection Override when predefined thresholds are exceeded. Dynamic Threshold Adjustment works with Service Level Supervisor to automatically adjust your thresholds as needed to activate reserve agents to help meet your administered service level goals. See Service Level Supervisor on page 86 for more information about how this feature works.

This section includes the following topics:

Where is Service Level Supervisor administered?

Service Level Supervisor, Dynamic Threshold Adjustment, and Call Selection Override are administered on page 2 of the Hunt Group form. Reserve agents are set up using the Agent LoginID form. (You can set or change reserve skills for existing agents using the Change Agent Skills Dialog Box in CMS Supervisor.) Call Selection Override must also be activated at the system level using the Feature-Related System Parameters form. Note that the Call Selection Override feature can be turned off at the system level using this form, eliminating the need to turn it off for each individual skill.

How to administer Service Level Supervisor for a skill

To administer Service Level Supervisor for a skill:

1. At the command line prompt of your SAT or terminal emulator, enter:

   `change hunt-group xxx`

   where `xxx` is the number of the hunt group for which you want to activate Service Level Supervisor.

2. Press **Return**.

3. Go to page 2 of the Hunt Group form.

4. Enter `y` in the `Service Level Supervisor?` field.

5. In the `Activate on Oldest Call Waiting?` field, choose one of the following actions:

   - Enter `y` if you want to use time in queue in addition to Expected Wait Time to activate reserve agents

   - Enter `n` if you want to use Expected Wait Time only to activate reserve agents

6. In the `Call Selection Override?` field, take one of the following actions:

   - Type `y` if you want to override the normal call selection method for a skill's assigned agents when the skill exceeds its thresholds

   - Type `n` if you do not want to override the normal call selection method of a skill's assigned agents when the skill exceeds its thresholds

   Note:
   Call Selection Override must also be activated system wide, using the Feature-Related System Parameters form.

7. In the `Level 1 Threshold(sec):` field, type the number of seconds at which you want reserve agents or call selection override to be activated if call selection override is used. A suggested guideline is to set the Level 1 threshold 5 seconds lower than your target speed of answer.

> **Note:**
> If you are activating Dynamic Threshold Adjustment, it is recommended that you use only one threshold. If you are not activating Dynamic Threshold Adjustment, you can enter a second threshold level in the `Level 2 Threshold(sec):` field.

8. In the `Dynamic Threshold Adjustment?` field, take one of the following actions:

   ● Enter **y** if you want Advocate to automatically adjust thresholds

   ● Enter **n** if you do not want Advocate to adjust thresholds

9. Enter a target service level in the `Service Level Target:` field, by entering a percentage in the first field and a time in seconds in the next field.

10. Press **Enter** to save your changes.

How to administer a Reserve Agent

To administer a reserve agent for a skill or group of skills:

1. At the command line prompt, enter:

   change agent-loginID *xxxxx*

   where *xxxxx* is the loginID for the agent whose assignment you want to administer.

2. Press **Return**.

   The system displays the following message:

   ```
   WARNING:  Agent must log in again before skill changes take effect
   ```

3. Assign this agent to the skill as a reserve agent by doing the following:

   a. In the `SN` (Skill Number) field, enter the number of the skill for which this agent will reserved.

   b. In the `RL` (Reserve Level) field for that skill number, choose one of the following actions:

      ● Enter **1** if this agent will be activated at the Level 1 Threshold

      ● Enter **2** if this agent will be activated at the Level 2 Threshold

   > **Note:**
   > Leave the `SL` (Skill Level) fields blank for an agent's reserve skills.

4. Repeat Step 3 for any other skills that this agent will serve as a reserve agent.

5. Press **Enter** to save your changes.

How to administer Call Selection Override system wide

To administer Call Selection Override at the system level:

> **Note:**
> If you administer this feature and later decide that you want to turn it off, enter `n` in the `Service Level Supervisor Call Selection Override?` field on the System-Parameters Features form and it will be disabled for all skills.

1. At the command line prompt of your SAT or terminal emulator, enter:

   `change system-parameters features`

2. Press **Return**.

3. Go to page 9 of the System-Parameters Features form.

4. In the `Service Level Supervisor Call Selection Override?` field, choose one of the following actions:

   ● Enter `y` if you want to override the normal call selection method of a skill's assigned agents when the skill exceeds its thresholds

   ● Enter `n` if you do not want to override the normal call selection method of a skill's assigned agents when the skill exceeds it thresholds

5. Press **Enter** to save your changes.

Feature interactions

This section provides important information about how various Business Advocate and Communication Manager features interact, and the effect that these interactions can have on administration, call handling, and reporting.

This section includes the following topics:

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BCMS and VuStats

This section includes the following topics:

- Acceptable Service Level (sec): field on page 108
- Service Level Supervisor on page 108

Acceptable Service Level (sec): field

The `Service Objective (sec):` field is located on the Hunt Group form. Service objective targets are entered in this field, which leaves the `Acceptable Service Level(sec):` field free for showing service level measurements through BCMS or VuStats.

Service Level Supervisor

Reserve agents for skills that are not in an over-threshold state are counted as "Other" on the MONITOR BCMS SKILL Report. Reserve agents for skills that are over threshold are counted as "ACD," "ACW," "AUX," or "Other" depending on the work mode and state of the agent.

Direct Agent Calls

This section includes the following topics:

Skill Level

Agents receive Direct Agent Calls before other ACD calls in most situations. However, Direct Agent Calls are not received first if:

- An agent's call handling preference is Skill Level, a skill is administered for Direct Agent Calls, and this skill is assigned a lower-level skill than any other skill

- An agent's call handling preference is Percent Allocation and the `Direct Agent Calls First?` option is not set

Percent Allocation

The Percent Allocation call selection method affects the handling of direct agent calls. If the `Direct Agent Calls First?` option is set, an agent receives Direct Agent Calls before any other ACD calls. If the `Direct Agent Calls First?` option is not set, an agent receives Direct Agent Calls only when the direct agent skill is the best percentage match. Time on direct agent calls counts as work time for the direct agent skill.

Service Level Supervisor

Agents who have only reserve skills cannot receive Direct Agent Calls. Callers hear an intercept tone when the call is received. If you have agents who are only assigned reserve skills and you want them to be able to receive direct agent calls, you must assign them to a direct agent skill as standard agents.

Agents receive Direct Agent Calls in their standard skills in the same way regardless of whether the skill is above or below its thresholds. That is, if the agent is administered to receive direct agent calls before other ACD calls, this happens regardless of whether a standard skill is over its thresholds. If the agent does not normally receive Direct Agent Calls first, this preference is maintained when the agent's standard skills are over threshold.

It is recommended that you do not use the Service Level Supervisor feature with a direct agent skill.

Least Occupied Agent

All of an agent's time on a Direct Agent Call is included in the agent's work time and occupancy.

Least Occupied Agent

The following table shows how Least Occupied Agent (LOA) tracks extension calls since agent AUX time is not included in the calculation of agent occupancy.

If the extension call . . .	Then LOA . . .
is in AUX	ignores this time
is in Auto-In/Manual-In with no ACD call on hold	tracks this as idle time
is in Auto-In/Manual-In with an ACD call on hold	tracks this as work time
is in ACW	• tracks this as idle time if `ACW Considered Idle?` is set to **y** on the Communication Manager System Parameters form • tracks this as work time if `ACW Considered Idle?` is set to **n** on the Communication Manager System Parameters form

Location Preference Distribution

Location Preference Distribution tries to route incoming Automatic Call Distribution (ACD) calls to agents located in the same location as the incoming trunk on which the call originated whenever possible. If there is a choice, calls are routed to agents at a different location only if a locally-routed call cannot meet the administered objectives for speed of answer, service level, and so on.

When there is more than one choice for call delivery, Local Preference Distribution matches the trunk and the agent location numbers. The Multiple Locations feature defines the location number. Delivery preference is given to the agent whose location number matches the incoming trunk location number.

Local Preference Distribution takes precedence over any Avaya Business Advocate call handling preferences.

For more information about Location Preference Distribution, see *Avaya Call Center Automatic Call Distribution (ACD) Guide*.

Reserve agents and Location Preference Distribution

In most cases, the selection of an agent or a call based on Location Preference Distribution takes precedence over Service Level Supervisor or Percent Allocation selection. Nevertheless, Service Level Supervisor and Percent Allocation take precedence when the system chooses a reserve agent for the following reasons:

- The skill is above the Estimated Wait Time (EWT) threshold with Service Level Supervisor

- The service level is below the threshold with Percent Allocation.

   Note:
   If more than one reserve agent is eligible for the call, Location Preference Distribution is used to choose the agent.

Percent Allocation

This section includes the following topics:

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Related topic

For an overview of Percent Allocation, see

Add or remove skills via Feature Access Code

If `percent-allocation` is entered in the `Call Handling Preference:` field on the Agent LoginID Form, the Add Skill and Remove Skill features cannot be used. If you attempt to use the Add Skill or Remove Skill features when Percent Allocation is enabled, the attempt is denied and you hear an intercept tone.

Agent log in and log out

The agent work time measurement used by Percent Allocation and Least Occupied Agent is initialized when an agent logs in. If an agent logs out during a shift, then logs back in, the agent's measurements for work time and occupancy reinitializes.

Note:
Logging in and out reduces the effectiveness of Percent Allocation, particularly the Dynamic Percentage Adjustment feature.

Auto Reserve Agents

The Percent Allocation Auto Reserve Agents feature is used to intentionally leave an agent idle in a skill if her target allocation for that skill has been exceeded. This can result in available agents with calls in queue. This is a normal and expected condition when Auto Reserve Agents is enabled. Additionally, this feature may result in lower occupancy for multi-skilled agents.

Agents can be auto-reserved for Percent Allocation when the Dynamic Advocate customer option is active. Use the Feature-Related System-Parameters form to define Percent Allocation for auto-reserve agents on a system-wide basis. The available values are `all` or `secondary-only`.

Agents are assigned a level 1 or level 2 reserve skill level on the Agent Login ID form. Agents become reserved for a skill when the work time in the skill exceeds their Percent Allocation target. The Percent Allocation target is assigned on the Agent Login ID form as a %. Only level 2 agents for that skill become auto-reserved if the secondary-only system assignment is used.

An auto-reserve agent does not receive calls for skills whose EWT for Percent Allocation is below the assigned threshold targets. These reserved agents only receive calls from those skills when the EWT for Percent Allocation is above the threshold.

Location Preference Distribution

For information about how Percent Allocation interacts with Location Preference Distribution, see .

Multiple call handling

All time with one or more ACD calls ringing, active, or on hold for two or more skills is included in the calculation of an agent's work time for each of the skills. In effect, this is "double counting" the agent's work time. This double counting affects call selection using the Percent Allocation feature.

Percent Allocation Distribution

The Percent Allocation Distribution (PAD) method is designed to work with the Percent Allocation call selection method.

> **Note:**
> When using PAD as an agent selection method for a skill, it is recommended that you administer Percent Allocation as the call handling preference for all agents in the skill.

Predicted Wait Time

Predicted Wait Time (PWT) is not used with Percent Allocation because Percent Allocation does not consider time in queue in the selection process.

Service Level Supervisor and reserve agents

This section includes the following topics:

- [Abandoned calls](#) on page 115
- [Agent work states](#) on page 115
- [Audix](#) on page 115
- [Auto available skills](#) on page 116
- [Location Preference Distribution](#) on page 116
- [Multiple call handling](#) on page 116
- [Multiple skill queuing](#) on page 116
- [Redirect on no answer (RONA)](#) on page 116

Related topic

For an overview of Service Level Supervisor, see [Service Level Supervisor](#) on page 39.

Abandoned calls

An abandoned call can change the state of a skill that is over threshold. That is, an abandoned call might cause a skill to drop from level 2 to level 1 or from level 1 to normal.

Agent work states

When an agent logs in, the agent's state is AUX in a standard skill and in a reserve skill, whether the skill is under threshold or over threshold.

When an agent becomes available, the agent's state is AVAILABLE in a standard skill and in an over-threshold reserve skill. In an under-threshold reserve skill, the agent's state is OTHER.

Audix

An EAS AUDIX agent cannot be administered with a reserve skill.

Auto available skills

An EAS auto available agent cannot be administered with a reserve skill.

Location Preference Distribution

For information about how Service Level Supervisor interacts with Location Preference Distribution, see

Multiple call handling

When a reserve agent in an Multiple Call Handling (MCH) skill becomes available and the skill is over threshold, the agent is eligible to receive calls for that skill, and all existing MCH rules apply. When a reserve agent in an MCH skill becomes available and the skill is not over threshold, the agent is not eligible to receive calls for that skill regardless of the MCH type. The administered MCH type for a skill does not change when the skill is over threshold.

Multiple skill queuing

When Service Level Supervisor is used, a call that is queued as a result of the Multiple Skill Queuing feature can change the state of a skill from normal to level 1 or from level 1 to level 2. Similarly, dequeuing a call that is queued as a result of the Multiple Skill Queuing feature can change the state of a skill from level 2 to level 1 or from level 1 to normal.

Redirect on no answer (RONA)

A call that is queued after being redirected can change the state of a skill from normal to level 1 or from level 1 to level 2, and such calls can be routed to reserve agents.

Service Objective

This section includes the following topics:

- Service Objective (sec): field on page 117
- Dynamic Queue Position on page 117

Service Objective (sec): field

The `Service Objective (sec):` field is available on the Hunt Group form. Service objective targets are entered in this field, which leaves the `Acceptable Service Level(sec):` field free for showing service level measurements through BCMS or VuStats. See Administering Service Objective on page 98 for details about using this field.

Dynamic Queue Position

The Dynamic Queue Position feature allows you to set service objectives for various VDNs and to queue calls for those VDNs to a single skill.

Note:
For best results, do not use Dynamic Queue Position with Multiple Priority Queuing, which overrides the feature.

Work time and occupancy

This section includes the following topics:

Agent hold

All time with one or more ACD calls on hold is included in the calculation of an agent's work time and occupancy regardless of whether MCH is activated. With Multiple Call Handling (MCH), agents can accrue work time in multiple skills simultaneously.

Agent log in and log out

The agent work time measurement used by Least Occupied Agent (LOA) and Percent Allocation is initialized when an agent logs in. If an agent logs out during a shift, then logs back in, the agent's measurements for work time and occupancy reinitialize.

Note:
Logging in and out reduces the effectiveness of Percent Allocation.

Call Coverage

All time with one or more ACD calls ringing is included in the calculation of an agent's work time and occupancy. This includes calls that are later redirected as a result of the Call Coverage feature.

Call Forwarding

All time with one or more ACD calls ringing is included in the calculation of an agent's work time and occupancy. This includes calls that are later redirected as a result of the Call Forwarding feature.

Call Park

After a call is parked by an agent, the call does not affect that agent's work time or occupancy.

Call Pickup

All time with one or more ACD calls ringing is included in the calculation of an agent's work time and occupancy. This includes calls that are later redirected as a result of the Call Pickup feature.

Conference or transfer

All time with one or more ACD calls on hold as a result of initiating a conference or transfer is included in the calculation of an agent's work time and occupancy.

Extension calls and LOA

The following table shows how LOA tracks extension calls (since agent AUX time is not included in the calculation of agent occupancy).

If the extension call . . .	Then LOA . . .
is in AUX	ignores this time
is in Auto-In/Manual-In with no ACD call on hold	tracks this as idle time
is in Auto-In/Manual-In with an ACD call on hold	tracks this as work time
is in ACW	• tracks this as idle time if `ACW Considered Idle?` is set to **y** on the Communication Manager System Parameters form. • tracks this as work time if `ACW Considered Idle?` is set to **n** on the Communication Manager System Parameters form.

Non-ACD calls

Time for non-ACD calls ringing, active, or on hold is not included in the calculation of an agent's work time and occupancy.

Redirect on no Answer (RONA)

All time with one or more ACD calls ringing is included in the calculation of an agent's work time and occupancy. This time includes calls that are ultimately redirected by RONA.

Timed After Call Work (ACW)

If the `ACW Agents Considered Idle` option is not set, Timed ACW time is included in the calculation of an agent's work time and occupancy.

VDN of Origin Announcement

All of the time spent listening to a VDN of Origin Announcement is included in the calculation of an agent's work time and occupancy.

Administering Business Advocate through CMS Supervisor

This section provides administration procedures for tasks that you can complete for existing agent login IDs using CMS Supervisor after initial administration is completed on the switch. It also includes information about setting Acceptable Service Levels for Call Management System (CMS) reporting.

This section includes the following topics:

Agent administration

This section provides instructions on how to perform agent administration for existing agent login IDs. New agent login IDs must be initially administered on the switch, and the agent must log in for the changes to take effect. Agents can be administered using the Change Agent Skills dialog box or the Multi-Agent Skill Change dialog box. This section includes procedures for using each dialog box.

This section includes the following topics:

Using the Change Agent Skills dialog box

The Change Agents Skills dialog box can be used to perform the following tasks for existing agent login IDs:

● Review agent skills

● Add skills per agent

● Delete skills per agent

● Administer call handling preferences

● Assign reserve agents

Accessing the Change Agent Skills dialog box

To access the Change Agent Skills dialog box:

1. Click **Commands** on the CMS Supervisor Controller.

2. Click **Agent Administration**.

3. Select the Automatic Call Distribution (ACD) by entering the ACD in the text box or selecting an ACD from the drop-down history list.

4. Click **Change Agent Skills** on the Operations tab.

   Note:
   > You can also access the Change Agent Skills dialog box from the Multi-Agent Skill Change dialog box.

5. Click **OK**.

   The system displays the **Select Agent/Template** dialog box.

6. Enter or select an agent or agent template.

7. Click **OK**.

   The system displays the **Change Agent Skills** dialog box.

Working with agent skills

This section includes the following topics:

Reviewing agent skills

To review an agent's skill assignments:

1. In the **Change Agent Skills** dialog box, choose one of the following actions:

   ● Click **OK** to accept the skill assignments.

   ● Click **Add Skills** or **Delete Skills** and follow the steps provided in this section to add or delete skills.

Adding skills per agent

Individual agent login IDs can be added to a skill through either individual administration or by copying the definition from one agent login ID to another.

To assign an agent to a skill:

1. In the **Change Agent Skills** dialog box, click **Add Skills**.

2. Add skills for the agent.

   The **Add Agent Skills** dialog box opens.

3. Select a skill for the agent and administer the agent's skill level or percent allocation for that skill.

   See Call selection methods on page 23 for details about using Skill Level or Percent Allocation.

4. Click **OK** to accept the skill assignments.

Deleting skills per agent

To remove an agent from a skill:

1. In the Change Agents Skills dialog box, click the skill from which you want to remove the agent.

2. Click **Delete Skills**.

   The **Delete Agent Skills** dialog box opens.

3. Click **OK** to delete the skill or skills.

Administering call handling preferences

Agent call handling preferences, also known as call selection methods, can be administered through the Change Agent Skills dialog box.

Three call handling preferences are available with Business Advocate:

- Greatest Need
- Skill Level
- Percent Allocation

See Call selection methods on page 23 for information about how the call handling preferences work.

This section includes the following topics:

- Administering Greatest Need on page 126
- Administering Skill Level on page 127
- Administering Percent Allocation on page 127
- Administering reserve agents on page 127

Administering Greatest Need

To administer Greatest Need:

1. In the Change Agent Skills dialog box, select the **Greatest Need** Call Handling Preference check box.

   Note:
   > Optional: To administer Service Objective, select **Service Objective**. Click **Add Skills**.

2. Add the Agent's Skills.

   The system displays the Assigned Skills grid.

3. Set the agent's skill level for each assigned skill.

4. To make a skill the agent's top skill (skill level 1), select the skill in the grid and click **Make Top Skill**.

5. Click **OK** to accept the assignment.

Administering Skill Level

To administer Skill Level as the call handling preference for an agent:

1. In the Change Agent Skills dialog box, select **Skill Level** from the **Call Handling Preference** check box.

   Note:
   Optional: To administer Service Objective, select **Service Objective**. Click **Add Skills**.

2. Add the agent skills.

   The system displays the Assigned Skills grid.

3. Set the agent's skill level for each assigned skill.

4. To make a skill the agent's top skill (skill level 1), click the skill in the grid and click **Make Top Skill**.

5. Click **OK** to accept the assignment.

Administering Percent Allocation

To set an agent's call handling preference to Percent Allocation:

1. In the Change Agent Skills dialog box, select **Percent Allocation** from the **Call Handling Preference checkbox**.

   Note:
   Optional: Select **Direct Agent Calls First** if you want the agent to receive Direct Agent calls before all other ACD calls. If you activate this feature, Direct Agent calls will override the Percent Allocation call selection method when direct agent calls are received.

2. Set the agent's percentage for each assigned skill. The total must equal 100% across all skills.

   Note:
   Optional: To make a skill the agent's top skill (skill level 1), select the skill in the grid and click **Make Top Skill**.

3. Click **OK** to accept the assignment.

Administering reserve agents

Reserve agents are agents who are assigned a skill level of Reserve 1 or Reserve 2 for the skills that they are backing up. Reserve 1 agents are engaged when their reserve skill exceeds its level 1 threshold. Reserve 2 agents are engaged when their reserve skill exceeds its level 2 threshold.

To administer reserve skills for an agent:

1. In the Change Agents Skills dialog box, select one of the following from the **Call Handling Preference** check box:

   ● **Greatest Need**

   ● **Skill Level**

   ● **Percent Allocation**

   Note:
   > Optional: To administer Service Objective, select **Service Objective**.

2. Click **Add Skills**.

3. Add skills for the agent based on the agent's expertise.

   The Assigned Skills grid opens.

4. Set the agent's skill level to Reserve 1 (R1) or Reserve 2 (R2) for each assigned reserve skill.

5. Click **OK** to accept the assignment.

Using an agent template

If you have several agents who need to have the same assigned skills and skill levels, use the **Agent Template** option on the Change Agent Skills Form to use the same information for another agent.

To use an agent template:

1. From the Select Agent/Template dialog box, enter or select the name of the agent or template in the Agent field.

   The system displays the Change Agent Skills dialog box with the skill profiles for that template.

2. Select the **Agent Name(s)/Login ID(s)** check box and enter up to 50 agents in the agent field or select up to 50 agents using the Available Agents list or Browse dialog box.

3. Click **OK**.

   CMS Supervisor buffers the change agent skills requests and sends them to the switch one at a time.

   The system displays a status dialog box with the status of each agent request.

   Note:
   > You can assign a script to change agent skills for up to 50 agents by clicking the **Script** button. For more information, see *Avaya Call Management System Administration*.

Accessing the Multi-Agent Skill Change dialog box

The Multi-Agent Skill Change dialog box is used in CMS Supervisor to move groups of agents between skills or to add agents to or remove agents from a skill. This dialog box can only be used with active agents with existing login IDs. Note that new agent login IDs must be administered on the switch.

> **Note:**
> If a change is requested for an agent or agents who are active on calls or unavailable, that is, agents who are on non-ACD calls, on hold, or have Direct Agent Calls waiting in queue, a pending flag is displayed next to the agent login ID. The pending flag is not displayed until the move can be completed. Update the Multi-Agent Skill Change dialog box by pressing **F5** or by double-clicking the skill in the skill list to see a list of agents who are assigned to that skill.

To access the Multi-Agent Skill Change dialog box:

1. From the CMS Supervisor Controller, click **Commands**.

2. Click **Agent Administration**.

3. Enter or select the name of the ACD.

4. Click **Multi-Agent Skill Change** on the Operations tab.

5. Select **OK**.

   The **Multi-Agent Skill Change** dialog box opens.

Adding agents to a skill

Agents are added to a skill by using the Add Agents to Skill dialog box. This box is accessed from the Multi-Agent Skill Change dialog box.

> Do not use this procedure to add multiple agents to a skill if those agents have a call handling preference of Percent Allocation. Doing so removes the administered percentages.

To add agents to a skill using the Add Agents to Skill dialog box.

1. On the Skills menu, click **Skill List**.

   The **Skill List** dialog box opens.

2. Click the skill that contains the agents you want to assign to another skill.

3. Click the names of the agents you want to assign to another skill.

4. Click **Agents**, then click **Add Agents to Skill**.

   The **Add Agents To Skill** dialog box opens.

5. In the **To Skill:** box, enter or select the skill.

6. In the **Level:** box, type or select the skill level that you want to assign to the added agents (1 to 16, r1 or r2).

7. Choose one of the following actions:

   ● Click **OK** to accept the skill assignment

   ● Click **Script** to save the procedure as a script

   Note:
   > Optional: Once the agent list is open for a skill, you can add or reassign agents using one of the following methods:

   ● From the agents list, click an agent or agents from the list. Click the right mouse button and select **Add Agents to Skill**.

   The system displays the Add Agents to Skill dialog box. Repeat Step 5.

   ● Open an agent list for the skill to which you want to add agents. Click an agent or agents from the original skill's agent list and use the drag-and-drop method to add the agents to the new skill.

Removing agents from a skill

Agents can be removed from a skill by using the **Remove Agents from Skill** dialog box. This box is accessed from the **Multi-Agent Skill Change** dialog box.

> Do not use this procedure to remove multiple agents from a skill if those agents have a call handling preference of Percent Allocation. Doing so removes the administered percentages.

To remove an agent using the **Remove Agents from Skill** dialog box:

1. On the **Skills** menu, click **Skill List**.

   The system displays the **Skill List** dialog box.

2. Select a skill by double clicking on that skill.

3. Click on the names of the agents you want to remove from the skill.

4. Click **Agents**, then click **Remove Agents from Skill**.

   The **Remove Agents From Skill** dialog box opens.

5. Choose one of the following actions:

   ● Click **OK** to remove the agents from the skill

   ● Click **Script** to save the procedure as a script

Note:
Option: After the agent list is open for a skill, you can remove agents from the skill. To do so, click an agent or agents from the list, click the right mouse button, and click **Remove Agents from Skill**.

The system displays the **Remove Agents From Skill** dialog box.

6. Repeat Step 5.

Moving agents between skills

The **Multi-Agent Skill Change** dialog box and the **Move Agents Between Skills** dialog box can be used to move agents between skills. Both methods are explained in this section.

This section includes the following topics:

- Using the Multi-Agent Skill Change dialog box on page 131
- Using the Move Agents Between Skills dialog box on page 132

Using the Multi-Agent Skill Change dialog box

The **Multi-Agent Skill Change** dialog box may be used to move a group of agents between skills.

To move a group of agents between skills:

1. On the **Skills** menu, click **Skill List**.

   The system displays a list of administered skills.

2. Click **Agents** and then click **List All Staffed Agents**.

   The system displays a list of active, logged-in agents.

3. In the **Skill List**, select a skill by double clicking on that skill.

   The system displays a list of active agents who are assigned to that skill.

4. In the **Agent List** window, click the names of agents that you want to move to this skill.
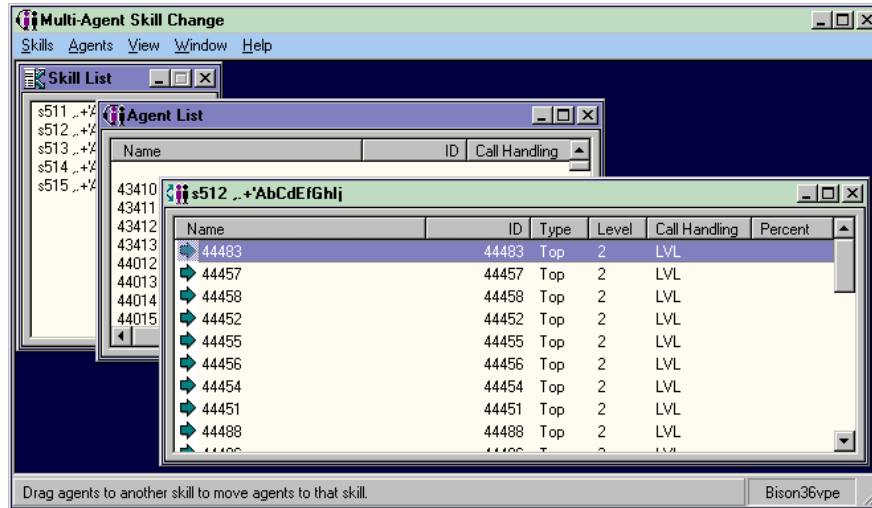
5. Hold down **Ctrl** and use the drag-and-drop method to move the agents to the open skill.

Using the Move Agents Between Skills dialog box

Agents can also be moved between skills by using the **Move Agents Between Skills** dialog box, which is accessed from the **Multi-Agent Skill Change** dialog box.

To move a group of agents between skills using this box:

1. In the **Agent List**, click on the names of the agents that you want to move to another skill.

2. Click **Agents** and then click **Move Agent to Another Skill**.

   The **Move Agents Between Skills** dialog box opens.

3. In the **To Skill:** field, enter or select the skill.

4. Take one of the following actions:

   ● If you want to preserve the agents' original levels for this skill, select the **Preserve Original Levels** check box.

   ● If you want to assign new skill levels (the same level will be chosen for all agents moved), click **Level**, and set the skill level that the added agents will have for the skill (1 to 16, r1 or r2).

5. Click **OK** to accept the skill assignment, or click **Script** to save the procedure as a script.

Administering acceptable service levels

Acceptable service levels can be established for CMS reporting on an existing hunt group through CMS Supervisor using the **Split/Skill Call Profile Setup** dialog box. This section explains how to administer acceptable service levels for reporting purposes.

The procedure provided in this section are for setting acceptable service levels for a skill for CMS reporting purposes only. Initial administration for implementing service levels or service objectives must be done through the switch.

To set Acceptable Service Levels for a skill:

1. Click **Commands** on the CMS Supervisor Controller.

2. Click **Contact Center Administration**.

   The **Split/Skill Call Profile Setup** dialog box opens.

3. Enter or select the skill for which you want to set the service level (this must have been previously assigned in the Dictionary).

4. In the `Acceptable Service Level:` field, enter the service level that you want to achieve for this skill. If you are routing based on percent within service level, and you want to verify how well your process works, this value must match the level that is administered on the Communications Manager forms.

5. In the service level increments fields, enter a progressively greater number of seconds in each increment. For example, entries in the first three fields of 5, 10, and 25 would mean a first increment of 0 to 5 seconds, a second increment of 6 to 10 seconds, and a third increment of 11 to 25 seconds.

   Note:
   It is not necessary that each contain the same number of seconds. Remember that each increment represents a longer wait time for the call and is used for both answered and abandoned calls.

Appendix A: Business Advocate database items and calculations

This section lists the CMS Call Management System (CMS) database tables, database items in the tables, and the standard Dictionary calculations that use the database items.

Note:
See *Avaya Call Management System Database Items and Calculations*, for full definitions of database terminology.

This section includes the following topics:

- Database items on page 135
- Dictionary calculations on page 137

Database items

This section includes the following topics:

- Split/Skill items on page 135
- Agent database items on page 136
- Agent Login/Logout database items on page 137

Split/Skill items

The following table lists the Split/Skill database items that support Business Advocate.

Split/Skill database items

ACDCALLS_R1	GNONACDAUXOUT	R1INACW
ACDCALLS_R2	GNONACDOUT	R1INAUX
FAGINRING	GNONACWIN	R1ONACD
FAVAILABLE	GNONACWOUT	R1OTHER
FINACW	GNONAUXIN	R1STAFFED

Split/Skill database items (continued)

FINAUX	GNONAUXOUT	R2AGINRING
FONACD	GNDA_INACW	R2AVAILABLE
FOTHER	GNDA_ONACD	R2INACW
FSTAFFED	GNOTHER	R2INAUX
GNAGINRING	GNSTAFFED	R2ONACD
GNAVAILABLE	I_NORMTIME	R2OTHER
GNINACW	I_OL1TIME	R2STAFFED
GNINAUX	I_OL2TIME	SKSTATE
GNINAUX0	MAX_TOT_PERCENTS	TOT_PERCENTS
GNINAUX1-99	R1AGINRING	
GNONACD	R1AVAILABLE	

Agent database items

The following table lists the agent database items that support Business Advocate.

Agent database items

DACALLS_FIRST	SKLEVEL2-20
GNSKILL	SKPERCENT
LEVEL	SKPERCENT2-20
PERCENT	TOPSKILL
PREFERENCE	USE_SVC_OBJ
ROLE	WORKSKLEVEL
SKLEVEL	-

Agent Login/Logout database items

The following table lists the Agent Login/Logout database items that support Business Advocate.

Agent Login/Logout database items

PREFERENCE	SKPERCENT
SKLEVEL	SKPERCENT2-20
SKLEVEL2-20	-

Dictionary calculations

This section explains the standard Avaya CMS Dictionary calculations and report-specific calculations that support Business Advocate.

This section includes the following topics:

-
-

Standard Dictionary calculations

The following table lists the standard Avaya CMS Dictionary reports that support Business Advocate.

Do not modify any of the standard Avaya CMS Dictionary calculations. If you modify the standard calculations, the meaning of the data will be changed.

Standard calculations

AVG_EQV_AGENTS_STFD	MAX_DEDICATED_AGT
DEDICATED_AGT	MAX_FTE_AGENTS
FACTIVE_AG	R1ACTIVE_AGT
FTE_AGENTS	R2ACTIVE_AGT
TEA_AVAUX	-

Report-specific calculations

The following calculations were added to CMS Supervisor reports to support Business Advocate. They are not stored in the database, but are stored with the reports. The report names listed in the table below indicate where the calculations are used.

The following table lists the report-specific calculations that support Business Advocate.

Report-specific calculations

% Aban
% Busy
% Disconnect
% Aban
% Busy
% Flow Out
% Agent Occup (Group) w/ACW
% Agent Occup (Group) w/o ACW

Glossary

Abandoned call
A call in which a caller hangs up before receiving an answer from an agent. The call could be queued to a skill, be in a vector, or be in vector processing before it is abandoned.

Acceptable service level
The time within which a contact center determines that calls for a particular skill should be answered.

Access permissions
Permissions assigned to a Call Management system (CMS) user so that the user can access different subsystems in CMS or administer specific elements (skills, trunks, vectors, and so on) of the ACD. Access permissions are specified as read or write permission. Read permission means that the CMS user can access and view data, for example, run reports or view the Dictionary subsystem. Write permission means that the CMS user can add, modify, or delete data and execute processes.

ACD
See Automatic Call Distribution (ACD).

ACD call
A call that was queued to a skill and was answered by an agent in that skill, or a call that queued as a Direct Agent Call and was answered by the agent for whom it was queued.

Acknowledgment
A window that requires you to confirm an action or to acknowledge a system message, for example, the system going down, warning, or fatal error for the user window. This window cannot be moved, sized, or scrolled and disappears only when you confirm the message.

Active agents
Agents who are in ACD, RINGING, and/or after call work (ACW) work states.

Activate Agent Trace
Window from which you can start CMS tracing of agent activities. These activities include all agent state changes until the trace is turned off. You must activate an agent trace to obtain an Agent Trace report.

Active VDN calls
The number of calls currently active in a VDN. The G3V4 vector enhancement "VDN Calls Routing" refers to the ability to program a vector step according to the number of active VDN calls. The number of active calls is referred to as "counted-calls" in the vector step.

ACW
See After Call Work (ACW).

Adjunct/Switch Applications Interface (ASAI)	An Avaya recommendation for interfacing adjuncts and communications systems, based on the CCITT Q.932 specification for layer 3. ASAI supports activities such as event notification and call control.
Adjusted work time	An agent's total work time with one or more ACD calls ringing, active, or on hold for any of an agent's skills expressed as a percentage of staffed time and adjusted by a one call lookahead.
After Call Work (ACW)	An agent state that generally represents work related to the preceding ACD call. Going on-hook after an ACD call during MANUAL-IN operation places the call in ACW. With Generic 1 and Generic 3, ACW is accessible by a key on the agent's set and may not be related to an ACD call.
Agent	A person who answers calls to an extension in an ACD skill. The agent is known to CMS by a login identification keyed into a telephone.
Agent Login ID	A number entered into a telephone by an ACD to activate the agent position. Agent logins are required for all CMS-measured ACD agents.
Agent occupancy	The total time with one or more ACD calls ringing, active, or on hold for any of an agent's assigned skills. Agent occupancy can also refer to the total call related and non-call-related ACW time for any of an agent's assigned skills divided by the total time staffed in any assigned skill expressed as a percentage.
	The calculation for agent occupancy is: 100 * (sum(I_RINGTIME + I_ACDTIME + I_ACDOTHERTIME + I_ACDAUX_OUTTIME + I_ACDAUXINTIME + I_ACWTIME) / sum(TI_STAFFTIME - TI_AUXTIME + I_ACDAUX_OUTTIME + I_ACDAUXINTIME)) where I_ACWTIME is an optional component. This calculation can be used when creating a new report with Avaya Report Designer or Avaya Report Wizard. AUX time is not included in the calculation of agent occupancy.
Agent position	The combination of agent login ID and the skills the agent is assigned. Data is collected for the agent by skill, so the total work for the agent must be summed over all skills in which the agent worked.
Agent role	Agent role is used in the agent table to describe how an agent participates in a skill. This role is based on skill level and call handling preference.
Agent selection	Selection of an agent when a call arrives for a skill that is in an agent surplus condition.

Agent state
A feature of agent call handling that indicates the agent's current state. Agent states include ACD, ACW, AVAIL, AUX, UNSTAFF, DACD, DACW, OTHER, UNKNOWN, and RING.

Data about these states is displayed in real-time and historical reports. See the definition of each state for additional information.

Agent surplus condition
The condition that exists when one or more agents are available to handle a call for a specific skill.

Agent terminal
The voice terminal used by a contact center agent.

Agent Trace
A report that can be helpful when evaluating how well individual agents are using their time. You must start an agent trace before you can obtain an Agent Trace report.

You can activate traces for a maximum of 25 agents at any one time. You can select the dates in which the trace will receive information. This report lists each agent activity and the time it occurred.

Agent work time
The total time with one or more ACD calls ringing, active, or on hold for any of an agent's assigned skills and optionally, the total call-related and non-call-related ACW time divided by the total time staffed in this skill expressed as a percentage.

AI
See Auto-In (AI).

Algorithm
A prescribed set of well-defined rules or instructions for the solution of a problem, for example, the performance of a calculation, in a finite number of steps.

Allocated agents
Agents with an assigned role of Allocated; that is, they have Percent Allocation assigned as a call handling preference through Business Advocate.

ANI
See Automatic Number Identification (ANI).

Announcement
A recorded message that normally tells the caller what destination the call has reached. The announcement also often tries to persuade the caller to stay on the line.

With Call Vectoring, announcements can be part of a vector's call processing. An announcement is assigned to a vector by entering an announcement number.

ASA
See Average Speed of Answer (ASA).

ASAI	See Adjunct/Switch Applications Interface (ASAI).
Auto-In (AI)	An ACD work mode that makes the agent available to receive calls and allows the agent to receive a new ACD call immediately after disconnecting from the previous call.
Automatic Call Distribution (ACD)	A switch feature. Automatic Call Distribution (ACD) is software that channels high-volume incoming call traffic to agent groups (splits or skills). Also an agent state where the agent is engaged in an ACD call (with the agent either talking to the caller or the call waiting on hold). See also Redirect On No Answer (RONA).
Automatic Number Identification (ANI)	A general industry term referring to knowledge of the calling party number (CPN).
Auto Reserve Agents	A feature of Percent Allocation that provides the ability to leave an agent idle even when one or more calls are in queue for one or more of the agent's assigned skills.
	This decision is made using a comparison of the agent's work time in the skill and the agent's target allocation for the skill.
Auxiliary work (AUX)	An agent work mode. For example, the agent is engaged in non-ACD work, is on break, in a meeting, or at lunch. An agent can reach this work mode by pressing the AUX WORK button or dialing the proper access code from the voice terminal.
Available (AVAIL)	An agent state. The extension is able to accept an ACD call.
Available agent	A logged-in agent in Auto-In (AI) or Manual-In (MI) with no ringing, active, or held call appearances. See also Multiple Call Handling (MCH) for alternative definitions of an available agent.
Available work state	An agent work state in which the agent is in either the AI or MI work mode and is available to receive ACD calls. In general, agents in either the AI or MI work mode are not available to receive calls if they are currently on a call or have placed a call on hold.
Average agent service time	The average time you are expecting or targeting for each agent to spend on an ACD call, including talk time and after call work (ACW) time.

Average Speed of Answer (ASA)

The average amount of time a caller waits in queue before connecting to an agent. ASA is usually an objective set by your contact center's management.

The ASA for a skill includes the time spent in queue and the time ringing an agent. ASA for a VDN includes the time spent in vector processing, including the time spent in queue and the time ringing an agent.

Best Service Routing (BSR)

A feature that routes ACD calls to the resource best able to service each call. BSR allows the switch to compare local and remote skills, identify the skill that will provide the best service, and deliver the call to that resource. BSR is part of the Avaya Virtual Routing product suite.

Calculation

A menu selection in the CMS Dictionary subsystem that gives the abbreviated name (calculation name) for the calculation that generates the data for a field in a report.

Call-based items

The category of database items in CMS that are committed to the database after the call completes. If a call starts and ends in different intrahour intervals, all of the call-based data is recorded in the interval in which the call completed. Most database items are call based.

Call handling preference

Business Advocate agent call handling preference. Also known as a call selection method. Preferences include Skill Level, Greatest Need, and Percent Allocation.

Call Management System (CMS)

An integrated analysis and reporting program that provides real-time and historical reports.

Call queue

An ordered list of calls per skill. The order can be based on queue priority followed by time in queue; that is, a higher priority call is serviced before a lower priority call regardless of time in queue.

Call selection

Selection of a call when an agent becomes available and one or more of the agent's assigned skills is in a call surplus condition.

Call selection measurement

The measurement that is used in the call selection process if an agent's call handling preference is administered as either Skill Level or Greatest Need. There are currently two call selection measurements, Current Wait Time and Predicted Wait Time.

Call Selection Override

An option with Service Level Supervisor that alters how calls are selected when overload thresholds are exceeded for one or more of an agent's skills.

If activated, when the threshold is exceeded calls are selected from skills that are over threshold to the exclusion of calls that are under threshold.

Call surplus condition The condition that exists when one or more calls are queued for a specific skill.

Call vectoring A switch feature that provides a highly flexible method for processing ACD calls using VDNs and vectors as processing points between trunk groups and skills. Call vectoring permits treatment of calls that is independent of skills.

Similar to a computer program, a call vector is a set of instructions that control the routing of incoming calls based on conditions that occur in a contact center environment. Examples of call vector conditions include time of day and the number of calls in queue.

Call Work Code (CWC) An ACD capability that makes sure that during or after the call, the agent can enter a string of digits and send these digits to the switch Call Management System for management reporting.

Caller needs The reason or reasons that a customer calls your contact center (used with the Expert Agent Selection feature).

Calls carried Trunk data. The number of inbound and outbound calls carried.

Business Advocate A collection of ECS features that provide new flexibility in the way a call is selected for an agent in a call surplus situation and in the way that an agent is selected for a call in an agent surplus condition.

Advocate also includes methods for automating staffing adjustments.

CMS Supervisor The Call Management System (CMS) application for the Microsoft Windows operating environment.

Change Agent Skills An agent's skills can be changed from CMS by using the Change Agent Skills window.

The Change Agent Skills dialog box allows the user to change the skill assignments for one agent. On this window a user can quickly see what skills are currently assigned to an agent and the user can easily change the agent's skill assignments.

CMS See Call Management System (CMS).

Connected (CONN) A trunk state. A caller and an agent are connected on an ACD call.

Current A CMS action that displays data from the current interval.

Current Interval Represents the current intrahour interval, which can be 15, 30, or 60 minutes. The current interval is part of the real-time database.

Current Wait Time (CWT)	The time that a call has already waited for service in a call queue.
CWC	See Call Work Code (CWC).
Daily Data	Interval data that has been converted to a 1-day summary.
Data Collection Off	In this state, CMS is not collecting ACD data. If you turn off data collection, CMS will not void data on current call activity.
Data Collection On	In this state, CMS is collecting ACD data.
Data Points	Points of historical data. A data point should include data for each interval of the working day.
Database	A group of tables that store ACD data according to a specific time frame: current and previous intrahour real-time data and intrahour, daily, weekly, and monthly historical data.
Database item	A name for a specific type of data that is stored in one of the CMS databases.
	A database item may store ACD identifiers (skill numbers or names, login IDs, VDNs, and so on) or statistical data on ACD performance (number of ACD calls, wait time for calls in queue, current states of individual agents, and so on).
Database tables	CMS uses these tables to collect, store, and retrieve ACD data. Standard CMS items (database items) are names of columns in the CMS database tables.

Date format	The standard format for entering dates on CMS reports. Acceptable formats are:
	Month/day/year (for example, 3/21/93)
	A "-" offset based on today's date (for example, -1 for yesterday). You can also enter a range of numbers (for example, 0 through -7)
	Separating individual data entry items using a semicolon (for example, 3/21/93;3/23/93;3/25/93)
	Entering ranges by placing a hyphen between entries (for example, 3/21/93-3/25/93)
	When you specify a date for a weekly report, that date or range of dates must correspond to the week start day selected in the System Setup-Storage Intervals window. If the date and day do not match, the message "No records found" is displayed in the status line.
	The month start date must be the first day of the month.
Delete	A CMS action that removes the entry on the window from the database.
Designer Reports	Customized reports that can be created using CMS Supervisor's Report Designer feature, and which are run from CMS Supervisor.
Dialed Number Identification Service (DNIS)	An ACD capability that enables calls to be routed based on the number dialed by the caller, for example, a specific 800 number set up for a promotion.
Dictionary	A CMS subsystem that can be used to assign names to various contact center elements such as login IDs, splits or skills, trunk groups, VDNs and vectors. These names are displayed on reports and make them easier to interpret.
Direct Agent calling	An EAS capability that makes it possible for a caller to reach the same agent every time and still include the call in the management tracking of the contact center. This is ideal for claims processing, for example, where a client needs to speak with the agent handling the claim. This flexibility ensures a high level of customer service without reducing management control.
Direct Agent Calls First	In Business Advocate, the **Direct Agent Calls First?** option is associated with Percent Allocation. With this option selected, even though an agent is percent allocated to a skill or skills, calls to the agent's Direct Agent skill take precedence over calls to the allocated percentages. In addition, if an agent has **Direct Agent Calls First?** assigned, those calls also take precedence over other calls, even in an over-threshold situation.

Dynamic Percentage Adjustment	A Release 9 Percent Allocation feature that, when activated, automatically adjusts agents' target allocations to help meet predefined service level targets.
Dynamic Queue Position	A Release 9 feature that, when activated, allows you to queue calls from multiple VDNs to a single skill, while maintaining different service objectives for those VDNs.
Dynamic Threshold Adjustment	A Release 9 feature that, when activated, works with Service Level Supervisor to automatically adjust overload thresholds to meet predefined service level targets.
EAD	See Expert Agent Distribution (EAD).
EAS	See Expert Agent Selection (EAS).
Entity	A generic term that refers to one of the following: Agent, Agent Group, Split or Skill, Trunk, Trunk Group, VDN, Vector, or Call Work Code.
Error message	A response from a program that indicates a problem has occurred or that something unexpected has happened on the system that requires your attention.
EWT	See Expected Wait Time (EWT)
Exception	A type of activity on the ACD that falls outside of the limits you have defined. An exceptional condition is defined in the CMS Exceptions subsystem, and usually indicates abnormal or unacceptable performance on the ACD by agents, splits or skills, VDNs, vectors, trunks, or trunk groups.
Exception reports	Reports that display occurrences of unusual call-handling events.
Expected Wait Time (EWT)	An estimate of how long a caller will have to wait to be served by a contact center while in queue, considering the current and past traffic, handling time, and staffing conditions.
	Time spent in vector processing before being queued and the time spent ringing an agent with manual answering operation is not included in the EWT prediction. Beginning with the G3V5 and R3V5 CMS, the EWT is a switch-based calculation.

Expert Agent Distribution (EAD)	An agent selection method, available only in an Expert Agent Selection (EAS) environment, in which idle agents are grouped by skill level (1 through 16, if the EAS-PHD customer option is set; 1 or 2 if the EAS-PHD customer option is not set).
	The least occupied (EAD-LOA) or most idle (EAD-MIA) skill level 1 agent is selected or, if no skill level 1 agent is available, the least occupied or most idle skill level 2 agent, and so on.
Expert Agent Selection (EAS)	An optional switch feature that builds on the power of the Call Vectoring and ACD features of the switch to match the skills required to handle a particular call to an agent who has at least one of the skills that a caller requires.
	The ACD queuing and the vector commands Queue-to and Check are used to route a call to an agent with the appropriate skill to handle that call. With EAS, call distribution is based on skill. You can match the skills required to handle a particular call to an agent who has at least one of the skills that a caller requires.
	CMS collects data on skills in the same manner as it collects data on splits. Real-Time agent reports generally indicate which skills the agents have, and in which skill they are currently working.
	Skill reports show the performance of the skill overall, displaying such items as the ASA, the number of calls, and the percentage of calls answered within the target service level for the skill.
	CMS also reports VDN data by VDN skill preference, so that customers can assess the contact center performance relative to calls requiring particular skills. CMS reports how many calls were handled, how long these calls waited for service, and the average talk time for calls queued to a particular skill preference in a particular VDN.
Extension call	Extension calls are any calls that are originated by agents and non-ACD calls received by agents. For the Generic 3 switches, these include calls an agent makes to set up a conference or transfer.
FBUSY	See Forced Busy (FBUSY).
FDISC	See Forced Disconnect (FDISC).
Flex Agents	Flex agents are agents who have a role of roving, backup, or allocated through Business Advocate. Top and reserve agents are not flex agents.
FMCH	See Forced Multiple Call Handling (FMCH).
Forced Busy (FBUSY)	A trunk state. The caller receives a forced busy signal.

Forced Disconnect (FDISC)	A trunk state. The caller receives a forced disconnect.
Forced Multiple Call Handling (FMCH)	A feature available with G3V4 or later switches that, when activated for a split or skill, allows calls to be automatically delivered to an idle line appearance, if the agent is in the Auto-In/Manual-In work mode and an unrestricted line appearance is available on the voice terminal.
Greatest Need	Agents with a call handling preference of Greatest Need receive calls based on the queue priority and wait time (Current Wait Time or Predicted Wait Time).
Historical Database	Contains intrahour records for up to 62 days, daily records for up to 5 years, and weekly and monthly records for up to 10 years for each CMS-measured agent, split or skill, trunk, trunk group, vector, and VDN.
Historical Reports	Display past ACD data for various agent, split or skill, trunk, trunk group, vector, or VDN activities. A report summary of call data into daily, weekly, or monthly totals.
HOLD	A trunk state. The agent has put the call on this trunk on hold.
IDLE	A trunk state. The trunk is not is use and waiting for a call.
II	See [Information Indicator (II)](#).
Idle agent queue	An ordered list of agents that may be available to take the next incoming call.
Information Indicator (II)	A two-digit code that identifies the type of originating line, for example, hotel or pay telephone, for incoming ISDN PRI calls.
Integrated Services Digital Network (ISDN)	A digital standard for telephony that enables, among other things, telephone, television, and computer signals on the same lines.
Interval-based items	A category of database items. These items represent the amount of time during a collection interval spent doing a particular activity. Interval-based items are updated throughout the collection interval and timing is restarted at the end of the interval.
	Interval-based items should only be used to show amount of time in an interval for an activity or to calculate percentages of time spent in an interval. Interval-based items should not be used to calculate averages, such as average hold time.

Intrahour interval   A segment of time starting on the hour and consisting of either 15, 30, or 60 minutes. An intrahour interval is the basic unit of CMS report time.

Least Occupied Agent (LOA)   An agent selection method that uses agent occupancy rather than position in an idle agent queue to determine which agent to select when a call arrives.

LOA can be used with either Uniform Call Distribution (UCD-LOA) or Expert Agent Distribution (EAD-LOA). This agent selection method is specific to Business Advocate.

List Trace Advocate   A function used to trace the activities of Advocate agents. These activities include all agent state changes until the trace is turned off. You must activate an agent trace to obtain List Trace Advocate information.

Location   A location, or site, refers to a physical location. This can be a building, a section of a building, or it can be what was once a separate ACD before the ATM WAN capability was used to merge separate ACDs with other ACDs into one large contact center. A location will typically be assigned one (or more) location IDs.

A location, despite being part of a larger contact center, may continue to have sole responsibility for handling certain 800 numbers. A location may also share responsibility for handling an 800 number by having some of its agents be part of a larger split or skill that includes agents from other locations.

Location ID for agents   An agent location ID is the ID of the agent terminal the agent is logged in to. It is associated with the DEFINTY port network ID to which the agent terminal is attached.

An agent cannot be assigned a location ID for reporting purposes until he or she logs into the ACD. Available on the DEFINITY ECS R7.1 with ATM and later.

Location ID for Trunks   The switch network location ID (1 to 44) that is associated with a trunk. A Location ID is not directly assigned to a trunk. Instead, it is assigned to a port network (this is done using the chcabinetx form).

Therefore, each trunk whose equipment location belongs to that port network is associated with that port network's location ID.

When running CMS reports that include location IDs (LOC_ID), those IDs defined on Communication Manager that are greater than 44 will return a default location ID of 0 to CMS. Support for location IDs above 44 is expected in a future release of CMS.

Logical Agent
An EAS feature that associates the agent's login ID with the physical extension when the agent logs in. Properties such as the assigned skills, class of restriction, and coverage path are associated with the login ID rather than with the physical extension. This allows agents to log in at any available set.

Agents are assigned a single set of work mode buttons, rather than one set per skill. This simplifies the agent's interface to the work mode buttons. When the "MI" or "AI" button is lit, the agent is available to take a call in any assigned skill.

The Logical Agent capability allows calling agents to connect by dialing in to their login IDs. Calls to login IDs may be treated as Direct Agent ACD calls, given the proper class of restriction, or may be treated as extension (personal) calls.

Treating the calls as Direct Agent Calls can be used to help distinguish business-related calls from personal calls.

LOGOFF
An agent trace work mode. An agent is logged out and is not available to take ACD calls.

LOGON
An agent trace work mode. An agent is logged in and is available to take ACD calls.

Maintenance
A CMS subsystem that is used for doing routine maintenance of the CMS, such as backing up data, checking on the status of the connection to the switch, and scanning the error log.

Maintenance Busy (MBUSY)
A trunk state. The trunk is maintenance busy; that is, it is out of service for maintenance purposes.

Manual In (MI)
An ACD work mode. MI makes the agent available to receive an ACD call and automatically places the agent into the ACW state upon release from the call.

MBUSY
See Maintenance Busy (MBUSY).

MCH
See Multiple Call Handling (MCH).

Measured
A term that means an ACD element (that is, an agent, split or skill, trunk, trunk group, vector, or VDN) has been identified to CMS for collection of data. If the ACD element is not measured, no data is collected.

MI
See Manual In (MI).

MIA
See Most Idle Agent (MIA).

Modify	A CMS action that changes the database entry to reflect the new values that are entered in the current primary window.
Monthly data	Daily data that has been converted to a monthly summary.
Most Idle Agent (MIA)	An ACD distribution method that maintains a queue of idle agents. An agent is put at the end of the list for a particular skill when the agent completes an ACD call for that skill.
Multi-Agent Skill Change dialog box	This dialog box allows the user to perform the following administration actions: add one or more agents to a skill, move one or more agents from one skill to another, remove one or more agents from a skill, and change the skill level for one or more agents' skills.
Multiple Call Handling (MCH)	A feature that allows a single agent to handle multiple ACD and/or non-ACD calls simultaneously. All but one of the calls must be on hold and only one call can be ringing. There are four types of Multiple Call Handling, each of which provides an alternative definition of an available agent as follows:
	On-request: An agent is considered available if all calls are on hold, an unrestricted call appearance is available, and the agent requests an ACD call by pressing the AI or MI button.
	Many-forced: An agent is considered available if an unrestricted call appearance is available and the agent is in the AI or MI work mode.
	One-forced: An agent is considered available if no ACD calls are ringing, active, or on hold, an unrestricted call appearance is available, and the agent is in the AI or MI work mode.
	One-per-skill: An agent is considered available for a skill if an unrestricted call appearance is available and the agent is in the AI or MI work mode and is not currently handling a call for the skill.
Multiple skill queuing	With Call Vectoring, a call can be queued in up to three skills at the same time.
Multiuser mode	Any administered CMS user can log in to CMS. Data continues to be collected if data collection is "on."
Name (synonym) fields	Fields in which you may enter a name (synonym) that has been entered in the Dictionary subsystem, for example, names of agents, splits or skills, agent groups, trunk groups, vectors, or VDNs.
Non-primary skill	When a call is queued to multiple skills, the second and third skills to which the call queues in a VDN are called non-primary skills. They are also referred to as secondary and tertiary skills, respectively.

OTHER
An agent state. The agent is working on a Direct Agent Call, working on a call for another skill, or has put a call on hold and has not chosen another work mode.

Overthreshold state
A skill goes into an overthreshold state when either the EWT or the time in queue (if Activate on Oldest Call Waiting has been enabled) exceeds an administered threshold.

This state exists until the EWT (and the time in queue, if the Activate on Oldest Call Waiting option has been enabled) are less than the administered thresholds for the skill.

PAD
See Percent Allocation Distribution (PAD).

Percent Allocation
Percent Allocation is a call handling preference used only with Business Advocate. This preference specifies that calls are to be selected for the agent based on a comparison of the time spent on calls for each skill and the percentage of time allocated for that skill for the agent.

Optionally, after call work (ACW) can be included in the work time.

Percent Allocation Distribution (PAD)
A Release 9 agent selection method that selects agents for calls based on a comparison of adjusted work time for each skill and the percentage of time allocated for each skill.

Percent (%) within service level
A measurement of the percentage of calls that were answered within a specific number of seconds.

Phantom Abandon Call Timer
A CMS capability that tracks information about abandoned calls. When the capability is enabled, calls with a duration that is shorter than the administered value (zero to ten seconds) are counted as phantom abandon calls. Setting the timer to zero disables it.

Predicted Wait Time (PWT)
An estimation of the time that a call will wait for service in a call queue if the currently available agent does not answer the call.

Previous interval
Represents one intrahour interval and is part of the real-time database. At the end of each intrahour interval, the contents of the current intrahour interval are copied to the previous intrahour interval portion of the real-time database.

PWT
See Predicted Wait Time (PWT).

QUEUED
A trunk state. An ACD call has seized the trunk and is queued to a split or skill waiting for an agent to answer.

Read permission   The CMS user can access and view data, for example, run reports or view the Dictionary subsystem. Read permission is granted from the User Permissions subsystem.

Real-time database   Consists of the current and previous intrahour data on each CMS-measured agent, split, trunk, trunk group, vector, and Vector Directory Number (VDN).

Real-time reports   Display current ACD call activity on agents, splits or skills, trunks, trunk groups, vectors, and VDNs for the current or previous intrahour interval. Current intrahour interval real-time reports are constantly updated as data changes during the interval. Previous intrahour interval real-time reports show data totals for activity that occurred in the previous intrahour interval.

Redirect On No Answer (RONA)   An ACD capability that assists the user if a call is not answered in a specified number of rings as preset by the contact center manager. The terminal extension, including a VRU port, is busied out and the call goes back into the queue at a higher priority.

Refresh rate   The number of seconds CMS waits for each update of the real-time report data. A user's fastest allowable refresh rate is defined in the User Permissions - User Data window as a minimum refresh rate. The default refresh rate when a user brings up the report input window is the administered minimum refresh rate plus 15 seconds.

Reserve agent   A reserve agent in Business Advocate is an agent who is eligible to receive a call only when a skill is in an over-threshold state. Reserve agents can be reserve 1 or reserve 2. Reserve 1 agents serve a skill that has exceeded its assigned overload 1 or overload 2 threshold. Reserve 2 agents only serve a skill that has exceeded its assigned overload 2 threshold.

Reserve level   A reserve level is a parameter of agent administration that specifies a certain skill as being handled by an agent only when an administered Business Advocate Service Level Supervisor threshold has been exceeded. There are two reserve levels, which correspond to the two thresholds that can be administered for a skill.

RINGING   An agent state. The time a call rings at an agent's voice terminal after leaving the queue and before the agent answers the call.

A trunk state. A call is ringing at the agent's voice terminal.

Rolling ASA   See Average Speed of Answer (ASA).

Roving agents   Agents with Greatest Need call handling preference have a role of Roving for that skill. That is, they receive calls based on a call's priority and time in queue, rather than on an assigned skill level.

Scripting   The CMS Scripting feature lets you create a script to run a specified report or run a report and export the data on schedule. The scripts require a customer-provided scheduler to be run at a later time.

SEIZED   A trunk state. A call is using the trunk either incoming or outgoing.

Service Level   A time specified in seconds within which all calls should be answered. Normally set as an objective by management. Usually referred to as Acceptable Service Level.

Service Level Supervisor   A feature that allows you to administer one or two overload thresholds for a skill that will be supported by reserve agents. When the Expected Wait Time (EWT) for an arriving call exceeds the threshold (or optionally, the time in queue of a currently queued call), the skill goes into an overload state.

When the appropriate overload state exists, agents who are preassigned to assist during overload periods are eligible to receive subsequent calls from the overloaded skill.

Service Objective   Service Objective works in conjunction with the Greatest Need and Skill Level call handling preferences to assign calls to agents as the agents become available. This feature is designed to give different levels of service to different skills.

Service Objective allows you to administer an acceptable service level per skill. DEFINITY ECS R6 or later determines which skill has a call with the highest percentage of time accrued toward the administered service objective time.

Single-user mode   Only one person can log into CMS. Data continues to be collected if data collection is "on." This mode is required to change some CMS administration.

Site   See Location.

Skill   Also known as an EAS hunt group. Calls are queued to skills and agents log into skills to become eligible to receive incoming calls.

Staffed agent   An agent who is currently logged in to the switch.

Standard agents   Standard agents are agents in a skill who are assigned a skill level from 1 to 16, rather than being reserve agents. Standard agents are also known as nonreserve agents. Standard agents can have roles of top, roving, backup, or allocated.

Standard reports   The set of reports that are delivered with the CMS or CMS Supervisor software.

Station   An unmeasured extension. An extension that is not currently staffed by an agent or that is a member of an unmeasured split or skill or hunt group.

Subsystem   Each CMS main menu selection (for example, Reports, Dictionary, System Setup, Exceptions, on so on) along with Timetable and Shortcut is referred to as a subsystem of the Call Management System.

Switch   A private switching system that provides voice-only or voice and data communications services including access to public and private networks for a group of telephones within a customer's premises.

System AUX   The switches use the reason code 0 as the default code for situations in which the switch places the agent in the AUX mode automatically (for example, when the agent logs in, when agent makes or receives extension calls from AI/MI mode, when the agent is taken out of service due to failure to answer a ringing call) or logs the agent out (for example, during a Move Agent While Staffed operation).

ASAI applications that change the agent's work mode to AUX or log the agent out without specifying a reason code result in a change to AUX or logout with the default reason code.

Tertiary Split/Skill   When a call is queued to multiple splits or skills, the third split or skill the call queued to in a VDN is called the tertiary split or skill.

Time Format   The standard format for entering times on CMS reports. Acceptable formats are:

AM/PM format (for example, 7:30AM-5:00PM)

Military time format (for example, 7:30-17:00)

Timetable   An activity task or group of activity tasks (like reports) that you can schedule for completion at a time that is convenient and nondisruptive for your contact center's operation.

Top Agents   Top agents are agents who have Skill Level call handling preference and have the lowest level number (and highest skill level) administered for that skill. These agents have also been designated as Top Agents for that skill (first administered, highest level). An agent can only be Top Agent on one skill at a time, but may have many skills with a level of 1, based on expertise.

Also, an agent can have an assigned skill level lower than 1 for a skill, but can still be Top Agent for that skill if there are no other higher skill levels assigned on that skill.

Trunk   A telephone circuit that carries calls between two switches, for example, between a Central Office (CO) and a switch.

Uniform Call Distribution (UCD)   The most idle or least occupied available agent for the skill, without regard to skill level. Can be used with Least Occupied Agent (UCD-LOA) or Most Idle Agent (UCD-MIA).

UNKNOWN   An agent state. CMS does not recognize the current state.

A trunk state. CMS does not recognize the state of the trunk.

Upgrade   The process of moving an existing CMS customer from one release or load to another, to give the customer the additional functionality provided in the new release. Depending on which release the customer is upgrading from, and to, the upgrade may involve upgrading the software only, or may involve upgrading software and hardware.

When an upgrade involves a major release, data migration may also be a necessary part of the upgrade process.

User ID   The login ID for a CMS user.

User permissions   A CMS subsystem that allows the CSM administrator to define user access permissions.

User window   A window you can move, size, or scroll. It may contain input fields, reports, or help information.

Vector   A list of steps that process calls in a user-defined manner. The steps in a vector can send calls to skills, play announcements and music, disconnect calls, give calls a busy signal, or route calls to other destinations.

Calls enter vector processing via VDNs, which may have received calls from assigned trunk groups, from other vectors, or from extensions that are connected to the switch.

Vector Directory Number (VDN)	An extension number that enables calls to access a vector for processing. A VDN is not assigned an equipment location. A vector is assigned to a VDN. A VDN can route calls to a vector when the calls arrive over an assigned automatic-in trunk group or when calls arrive over a dial-repeating (DID) trunk group and the final digits match the VDN.
	The VDN by itself may be dialed to access the vector from any extensions that are connected to the switch.
VDN Calls-Counted	Also known as counted-calls to VDN and active VDN calls. A Call Vectoring capability available with G3V4 or later switches. Counted-calls to VDN is a parameter of the "go to step" and "go to vector" commands that provides conditional branching to a different step in the same vector or to a different vector based on the number of incoming trunk calls a VDN is currently processing.
VDN skill preference	Up to three skills can be assigned to a VDN. Calls use VDN skills for routing based on the preference that you administer in the vector. VDN skill preferences are referred to in the vector as "1st," "2nd," or "3rd."
Weekly data	Daily data that is converted to a weekly summary.
Window count	The number of primary windows that can be open at any one time.
Write permission	The CMS user can add, modify, or delete data and execute processes. Write permission is granted from the User Permissions subsystem.

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