



# **Administering Dynamic Routing 3.2**

Release 3.2  
Issue 1.0  
October 2017

© 2015-2017 Avaya Inc.  
All Rights Reserved.

#### **Notice**

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

#### **Documentation disclaimer**

“Documentation” means information published by Avaya in varying mediums which may include product information, operating instructions and performance specifications that Avaya may generally make available to users of its products and Hosted Services. Documentation does not include marketing materials. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of documentation unless such modifications, additions, or deletions were performed by Avaya. End User agrees to indemnify and hold harmless Avaya, Avaya’s agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

#### **Link disclaimer**

Avaya is not responsible for the contents or reliability of any linked websites referenced within this site or documentation provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

#### **Warranty**

Avaya provides a limited warranty on Avaya hardware and software. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya’s standard warranty language, as well as information regarding support for this product while under warranty is available to Avaya customers and other parties through the Avaya Support website: <http://support.avaya.com> or such successor site as designated by Avaya. Please note that if You acquired the product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to You by said Avaya Channel Partner and not by Avaya.

#### **Licenses**

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, [HTTP://SUPPORT.AVAYA.COM/LICENSEINFO](http://support.avaya.com/licenseinfo) OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AVAYA CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA CHANNEL PARTNER; AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO

INTERCHANGEABLY AS “YOU” AND “END USER”), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE (“AVAYA”).

Avaya grants You a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to You. “Software” means computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products, pre-installed on hardware products, and any upgrades, updates, patches, bug fixes, or modified versions thereto. “Designated Processor” means a single stand-alone computing device. “Server” means a Designated Processor that hosts a software application to be accessed by multiple users. “Instance” means a single copy of the Software executing at a particular time: (i) on one physical machine; or (ii) on one deployed software virtual machine (“VM”) or similar deployment.

#### **License type(s)**

**Designated System(s) License (DS).** End User may install and use each copy or an Instance of the Software only on a number of Designated Processors up to the number indicated in the order. Avaya may require the Designated Processor(s) to be identified in the order by type, serial number, feature key, Instance, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

**Concurrent User License (CU).** End User may install and use the Software on multiple Designated Processors or one or more Servers, so long as only the licensed number of Units are accessing and using the Software at any given time. A “Unit” means the unit on which Avaya, at its sole discretion, bases the pricing of its licenses and can be, without limitation, an agent, port or user, an e-mail or voice mail account in the name of a person or corporate function (e.g., webmaster or helpdesk), or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software. Units may be linked to a specific, identified Server or an Instance of the Software. **Database License (DL).** End User may install and use each copy or an Instance of the Software on one Server or on multiple Servers provided that each of the Servers on which the Software is installed communicates with no more than one Instance of the same database.

**CPU License (CP).** End User may install and use each copy or Instance of the Software on a number of Servers up to the number indicated in the order provided that the performance capacity of the Server(s) does not exceed the performance capacity specified for the Software. End User may not re-install or operate the Software on Server(s) with a larger performance capacity without Avaya’s prior consent and payment of an upgrade fee.

**Named User License (NU).** You may: (i) install and use the Software on a single Designated Processor or Server per authorized Named User (defined below); or (ii) install and use the Software on a Server so long as only authorized Named Users access and use the Software. “Named User”, means a user or device that has been expressly authorized by Avaya to access and use the Software. At Avaya’s sole discretion, a “Named User” may be, without limitation, designated by name, corporate function (e.g., webmaster or

helpdesk), an e-mail or voice mail account in the name of a person or corporate function, or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software.

Shrinkwrap License (SR). You may install and use the Software in accordance with the terms and conditions of the applicable license agreements, such as "shrinkwrap" or "clickthrough" license accompanying or applicable to the Software ("Shrinkwrap License").

#### **Copyright**

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, Hosted Service, or hardware provided by Avaya. All content on this site, the documentation, Hosted Service, and the product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

#### **Third Party Components**

"Third Party Components" mean certain software programs or portions thereof included in the Software or Hosted Service may contain software (including open source software) distributed under third party agreements ("Third Party Components"), which contain terms regarding the rights to use certain portions of the Software ("Third Party Terms"). As required, information regarding distributed Linux OS source code (for those products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the products, Documentation or on Avaya's website at: <http://support.avaya.com/Copyright> or such successor site as designated by Avaya. You agree to the Third Party Terms for any such Third Party Components. THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com).

#### **Note to Service Provider**

The product or Hosted Service may use Third Party Components subject to Third Party Terms that do not allow hosting and require a Service Provider to be independently licensed for such purpose. It is your responsibility to obtain such licensing.

#### **Preventing Toll Fraud**

"Toll Fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of Toll Fraud associated with your system and that, if Toll Fraud occurs, it can result in substantial additional charges for your telecommunications services.

#### **Avaya Toll Fraud intervention**

If You suspect that You are being victimized by Toll Fraud and You need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support website: <http://support.avaya.com> or such successor site as designated by Avaya. Suspected security vulnerabilities with Avaya products should be reported to Avaya by sending mail to: [securityalerts@avaya.com](mailto:securityalerts@avaya.com).

#### **Downloading Documentation**

For the most current versions of Documentation, see the Avaya Support website: <http://support.avaya.com>, or such successor site as designated by Avaya.

#### **Contact Avaya Support**

See the Avaya Support website: <http://support.avaya.com> for product or Hosted Service notices and articles, or to report a problem with your Avaya product or Hosted Service. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: <http://support.avaya.com> (or such successor site as designated by Avaya), scroll to the bottom of the page, and select Contact Avaya Support.

#### **Trademarks**

The trademarks, logos and service marks ("Marks") displayed in this site, the Documentation, Hosted Service(s), and product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the Documentation, Hosted Service(s) and product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party. Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

## Contents

<b>Chapter 1: Introduction.....</b>	<b>8</b>
Purpose .....	8
Intended audience.....	8
<b>Chapter 2: Dynamic Routing Overview .....</b>	<b>9</b>
Overview .....	9
High-level objective .....	9
Value proposition for different users .....	9
Customer interactions in Dynamic Routing.....	10
Role of Dynamic Routing in Interaction Flow .....	10
Modules of Dynamic Routing .....	11
Routing Administration .....	12
Config Store - Data Grid.....	12
Metrics Service.....	14
Metrics Information.....	14
Counters.....	15
Routing Service.....	15
Dynamic Routing features.....	16
High-level call flow steps.....	18
<b>Chapter 3: Getting Started.....</b>	<b>20</b>
Logging into the Routing Administration application .....	20
Dynamic Routing Administration application.....	22
Logging out of the Routing Administration application.....	23
Licenses .....	23
Viewing the Dynamic Routing license details .....	23
<b>Chapter 4: Managing Decision Functions.....</b>	<b>25</b>
Overview .....	25
Dynamic Routing features.....	25
Routing Decision Object.....	26
Creating a Decision Function .....	26
Deleting a Decision Function .....	27
Modifying a Decision Function .....	27
Decision functions fields descriptions .....	28
<b>Chapter 5: Segmentation Tables.....</b>	<b>30</b>
Overview .....	30
Elements of Segmentation Management.....	30
Uses of Segmentation Tables .....	30

Creating a Segmentation Table .....	31
Segmentation table field descriptions .....	31
Button descriptions.....	34
Segmentation Rule – evaluation and selection.....	35
Adding a segmentation rule .....	35
Adding a destination in the Segmentation rule .....	36
User Preferences for Segmentation Table.....	37
Deleting a Segmentation Table.....	37
Modifying a Segmentation Table .....	38
Cloning a Segmentation Table.....	38
<b>Chapter 6: Working with Strategy Settings and Strategy Scripts .....</b>	<b>40</b>
Overview .....	40
Creating a Strategy Setting.....	40
Strategy Settings field descriptions .....	40
Deleting Strategy Settings.....	41
Modifying Strategy Settings .....	42
Creating Strategy Scripts .....	42
Strategy Scripts fields and button descriptions.....	43
Edit Strategy Script fields and button description .....	45
Deleting Strategy Scripts.....	48
Modifying Strategy Scripts .....	48
Destination Aliases.....	49
Script Variables .....	49
Timetables.....	49
Timetable Date Definitions.....	49
Examples for defining Timetables .....	50
Different uses of Timetables .....	50
Creating a Timetable.....	51
Edit Timetable fields and button descriptions .....	52
Days of Week field descriptions .....	53
Holiday Entry field descriptions .....	53
Deleting a Timetable .....	54
Modifying a Timetable .....	54
Decision Tracer .....	55
Lookup Tables.....	56
Lookup Tables field and button descriptions .....	57
<b>Chapter 7: Administering Destinations .....</b>	<b>60</b>
Overview .....	60

Administering Agent Groups .....	60
Creating Agent Groups .....	60
Agent Groups field descriptions .....	61
<b>Administering Services</b> .....	62
Services field descriptions.....	62
<b>Administering ACDs</b> .....	63
ACDs field descriptions .....	63
<b>Modifying the details of an ACD</b> .....	64
<b>Administering Companies</b> .....	64
Company field descriptions .....	64
Deleting Companies.....	65
<b>Administering Locations</b> .....	66
Locations field descriptions .....	66
<b>Administering Applications</b> .....	67
Applications field descriptions .....	67
<b>Adding or deleting an Application</b> .....	67
<b>Chapter 8: Administering System Properties</b> .....	<b>69</b>
<b>System Properties Overview</b> .....	69
Administering the Platform properties .....	69
Platform properties field descriptions .....	70
Administering the Routing Service properties .....	70
Routing Service properties field descriptions .....	70
Administering the Routing Admin properties.....	71
Routing Admin properties field descriptions.....	72
Administering the Metrics Service properties.....	73
Metrics Service properties field descriptions .....	73
Administering the Config Store properties .....	75
Config Store properties field descriptions .....	75
<b>Chapter 9: Administering Global Properties</b> .....	<b>80</b>
Overview .....	80
Administering the ACD Global Properties.....	80
ACDs Global Properties field descriptions .....	81
Administering the Agent Group Global Properties .....	81
Agent Group Global Properties field descriptions .....	81
<b>Administering the Location Global Properties</b> .....	82
Location Global Properties field descriptions .....	82
<b>Administering the Company Global Properties</b> .....	82
Company Global Properties field descriptions .....	83
<b>Administering the Service Global Properties</b> .....	83

Services Global Properties field descriptions.....	84
<b>Chapter 10: Real-time monitoring.....</b>	<b>85</b>
Overview .....	85
Viewing metrics .....	86
Viewing metrics for a Destination.....	86
Viewing the traffic for a Destination .....	86
<b>Chapter 12: Administering Users and Roles .....</b>	<b>87</b>
Changing the password .....	87
Adding a new user .....	88
Deleting a user .....	88
Modifying a user.....	88
<b>Chapter 13: User Roles and Permissions .....</b>	<b>90</b>
User roles.....	90
Permissions.....	90
Defining permissions for a user role .....	90
Permissions for different tasks.....	91
Audit Logs .....	92
<b>Glossary.....</b>	<b>94</b>
<b>Index.....</b>	<b>95</b>

# Chapter 1: Introduction

---

## **Purpose**

This document describes how to use the administration features of Dynamic Routing (DR).

---

## **Intended audience**

This document is intended for people such as IT personnel and personnel in different Lines of Business. The personnel use the Routing Admin module of Dynamic Routing to administer the Dynamic Routing application.

# Chapter 2: Dynamic Routing Overview

---

## Overview

Dynamic Routing provides a centralized, easy to administer, web-based, and extensible Contact Center (CC) Business Rules Decision Engine for large CC operations with heterogeneous architectures. Dynamic Routing works with other Avaya products, such as Avaya Experience Portal, Avaya Communication Manager Elite, Avaya Aura Session Manager, Context Store, and Experience Development Platform. Dynamic Routing also supports environments with third-party Interactive Voice Response (IVR) and Automatic Call Distribution (ACD) systems.

A large Enterprise Contact Center operation has several sites, internal or outsourced. It also employs hundreds of agent groups to deal with all variations of products, customer segments, and services. Many times these sites are geographically spread because of specific local traits, regulations, and customer proximity. Multiple ACD systems are required because of the size of these operations. Interactions come through multiple channels from locations different than the sites where human resources are present. To manage this complexity, enterprises must deploy large and distributed contact centers. The contact centers must also have the capability to precisely control from a central location where a call is sent, optimizing the cost and customer satisfaction.

---

## High-level objective

Dynamic Routing (DR) provides dynamic call routing across various Automatic Call Distribution (ACD) systems that a customer operates. It plays a vital role in load balancing calls across large and distributed contact centers. The routing logic determines the call segmentation and selects the destination to route the incoming call.

DR has a component called Routing Service. Routing Service provides routing decisions for any incoming channel such as voice or email, based on the routing parameters that you configure in Routing Administration. Based on routing decisions, Routing Service determines the next destination of the call. Routing Service selects the destination from a preconfigured group of possible destination skills in various ACDs or applications.

---

## Value proposition for different users

The Dynamic Routing Administration clearly delineates the concerns between the IT Personnel or the Script Writers and the Line of Business users.

- The IT Personnel or Script Writers are users with the skillset and responsibility to create and test traffic distribution strategies.
- The LOB users must perform daily Routing Operation. The LOB users can use sophisticated distribution strategies and adjust the strategies according to the needs of

each call segment. With Dynamic Routing, LOB users can make quick and effective changes to the system. Users can make the changes by modifying Strategy Settings on web forms, without diving into the script complexity.

---

## Customer interactions in Dynamic Routing

At the highest Contact Center solution level, customer interactions follow these four main logical steps:

- 1) **Interaction Management:** When an interaction begins, the first step is to offer an automatic self-service greeting and menu to the customer. At this point, Dynamic Routing does the following:
  - Identifies the customer who is interacting.
  - Understands the intent of the customer.
  - Collects the context of the call.
  - Handles signaling and media through an Avaya or third-party IVR-sequenced application through Avaya Session Manager or Engagement Development Platform.

The information captured during this stage forms the interaction attributes.

- 2) **Segmentation:** Based on interaction attributes, the Segmentation stage determines the interaction. Dynamic Routing differentiates interactions by loyalty, region, and product or language or both. During Segmentation, the interaction can:
  - Continue to go through more self-service applications.
  - End in self-service.
  - Require a live Agent.
- 3) **Destination Selection:** The Destination Selection stage helps find the best destination such as a specific Agent Queue. The Destination Selection strategy uses complex information to make the best decision. For example, real-time Contact Center metrics, service-level agreements, and regulatory metrics.
- 4) **Agent Assignment:** The underlying Automatic Call Distribution (ACD) System or Engagement Development Platform selects the specific Agent within the selected destination Agent Queue.

---

## Role of Dynamic Routing in Interaction Flow

Figure 1: Dynamic Routing Interaction Flow shows how Dynamic Routing plays a vital role within the Interaction Flow for multiple types of media. Dynamic Routing provides flexibility and ease of administration during Segmentation and Destination Selection.

DR is initiated by Avaya or third-party Interactive Voice Response (IVR) or other Interaction Manager as a decision engine. DR is not involved in call signaling, call control, or media control.

DR only receives data about the interaction such as context attributes, universal call id (UCID), and more and returns with a transfer target or Queuing VDN number to the IVR.

The Interaction Manager controls the call signaling and media. DR provides the transfer target and influences the call route. However, DR has no control of the transfer mechanism such as Blind Transfer or Warm or Supervised Transfer. The IVR platform completely handles the transfer mechanism.

The dynamic routing logic determines the type of interaction segment and selects the destination to route the interaction to.

Dynamic Routing has a component called Routing Service. Routing Service provides routing decisions for any incoming channel such as voice or email based on routing parameters that users configure in Routing Administration. Routing Service selects the destination from a preconfigured group of possible destinations in various Automatic Call Distribution (ACD) Systems or Applications.

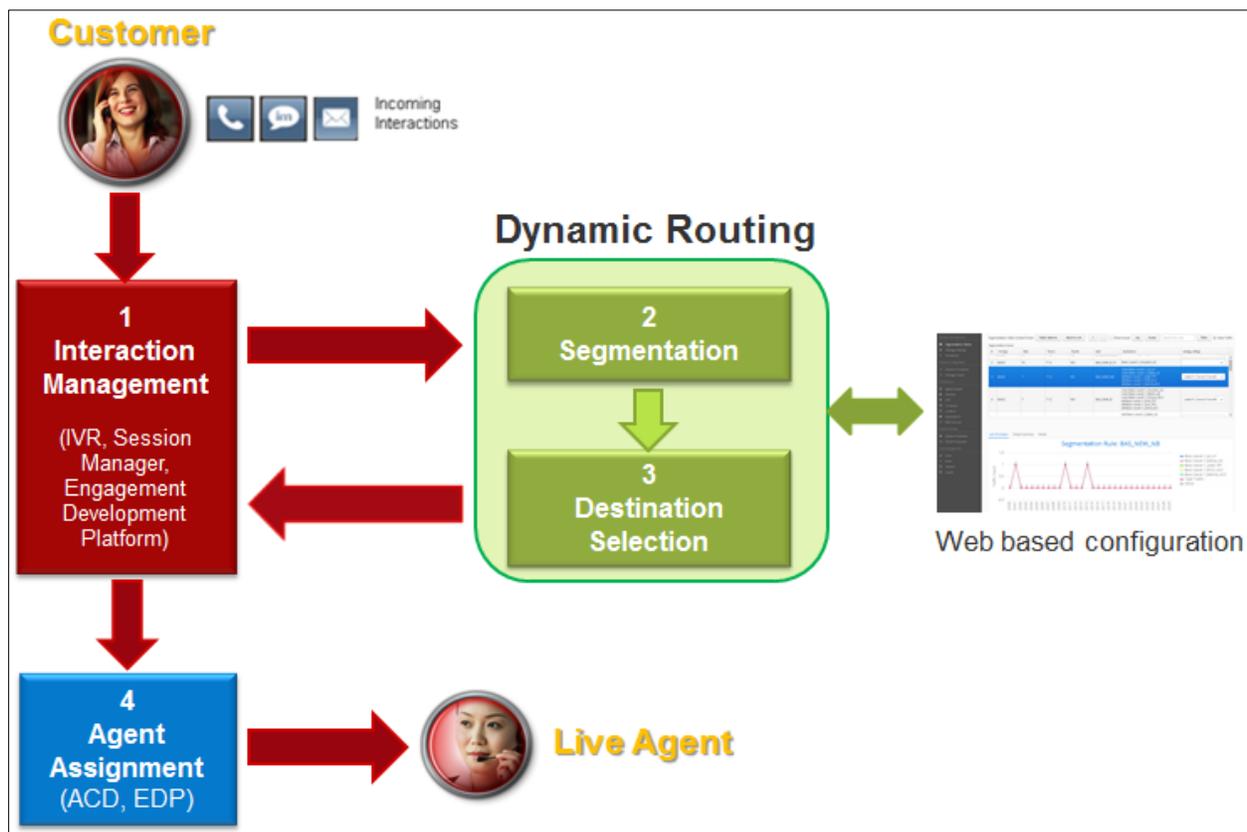


Figure 1: Dynamic Routing Interaction Flow

## Modules of Dynamic Routing

The Dynamic Routing application is divided into four logical modules:

- Routing Administration
- Config Store (Data Grid)
- Metrics Service
- Routing Service

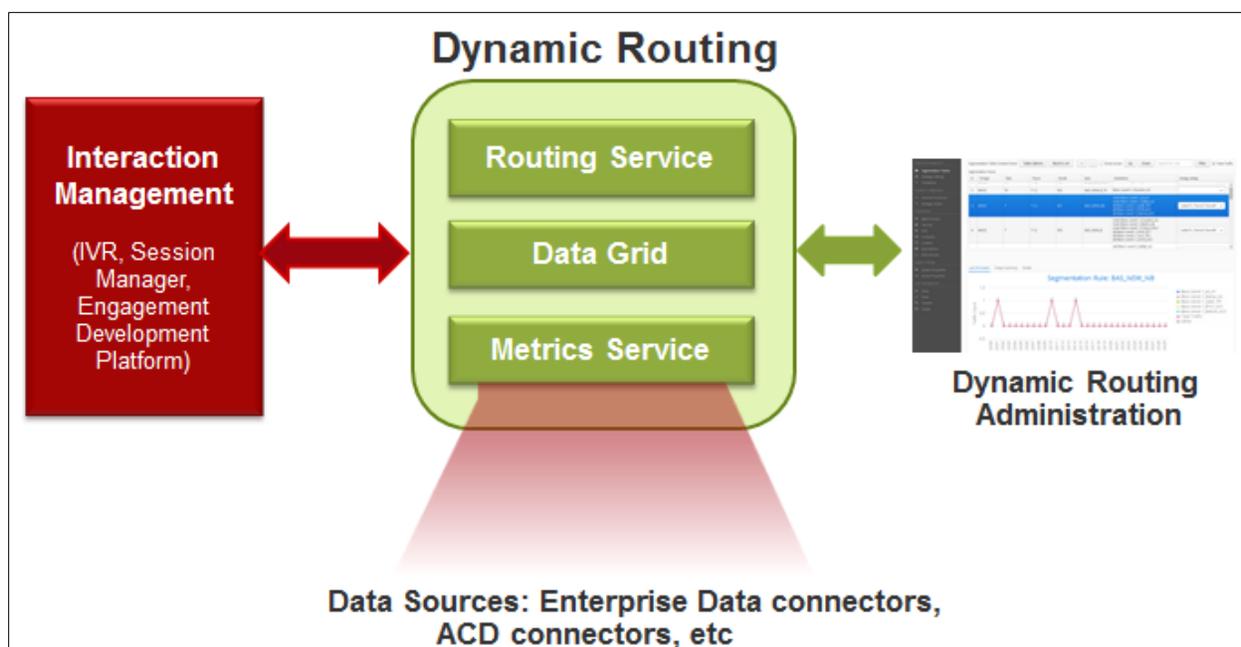


Figure 2: Modules of Dynamic Routing

## Routing Administration

Routing Administration is a web application. Users can configure, monitor, and maintain data related to routing logic.

- Configure call segment attributes and rules. Call segment attributes are known as Dimensions in Dynamic Routing.
- Define potential destinations such as Agent Groups, Applications, or Services, or collection of Agent Groups that the incoming calls can be routed to.
- Build routing strategies and preferences across available destinations for the configured call segments.
- Expand the configuration model by adding user-defined Global Properties on all Agent Group, Automatic Call Distribution (ACD) System, Company, and Location objects.
- Define a strategy for Day of the week (DOW) and Time of the day (TOD) routing.
- Configure users and define roles.
- Manage alarms and notifications for system issues.
- Monitor the system performance.

## Config Store - Data Grid

Config Store has a Configuration Data Model (CDM) that stores configuration data. Config Store stores the configuration data in local memory for quick access across Dynamic Routing nodes in the network. It also stores data in the back-end database for persistence. ConfigStore has the following data entities:

- **Automatic Call Distribution (ACD):** A system that distributes incoming calls to a group of agents.
- **Locations:** The physical and geographical locations of agents.
- **Company:** The organization or agency that trains and pays the agents.
- **Destination:** A possible target where an interaction can be sent. For example, Agent Group, Application, or Service.
- **Destination Alias:** A tag to indicate the purpose of the Destination. A destination alias helps the user to map potential destinations, when scripts are re-used.
- **Agent Group:** A set of agents grouped on the basis of some common criteria. While an ACD can contain multiple agent groups, each agent group belongs to only one ACD.
- **Application:** Represents a destination for routing a call to an Interactive Voice Response (IVR) sub-portal or sub-flow but not to an Agent Group.
- **Service:** A set of Agent Groups.
- **System Property:** Represents System and Application properties for different software components. For example, System, Platform, Routing Service, Routing Administration, Metrics Service, and Configuration Store.
- **Global Property:** Adds custom properties to the entities defined in Dynamic Routing. Scripts consider entities and their Global Properties to adjust decision and routing process accordingly.
- **Segmentation Table:** Represents a set of Segmentation Rules that help Dynamic Routing to partition the interactions such as calls into segments. Dynamic Routing does this partition so that each segment can be best managed and optimally routed.
- **Segmentation Rule:** Compares various attributes of an interaction such as a call to determine the type of call it.
- **Dimension:** Represents one aspect to differentiate a call from other calls. Typically, several dimensions are used to define a segment. Dimensions can be the characteristics that a contact center uses to define its call types. A Dimension can be a product line, language, customer loyalty score, and more. With Dimensions, Segmentation rules identify the type of call and then the follow-on Strategy and Destinations that must be considered to route the call.
- **Decision Function:** Represents an entry point to the Routing Service. It includes a series of steps that lead to a Decision. It contains the initial Strategy Script to be executed to help make the decision.
- **Strategy:** Represents a strategy script and associated variables that help Dynamic Routing to deliver the Destination Selector feature. The Destination Selector feature determines the best destination to route an interaction.

- **Script Variables:** Used to alter the process of script execution without modifying the script. Script variables can be altered by Routing Administration and used immediately by the scripts already running.
- **Timetable:** Represents an entity that defines time intervals that can be used for configurations across different features. The Timetable defines dates such as Day of Week (DOW) and holidays. The Timetable also defines Interval Names that are arbitrary strings and are defined according to a particular consumer.

---

## Metrics Service

In Dynamic Routing, metrics provide the current status information for destinations. Metrics Service provides the storage to save and retrieve metrics for a specific destination. A destination is a possible resource or endpoint where Dynamic Routing can route an interaction. A metric is the status information which is either collected or calculated by Dynamic Routing.

Metrics Service is accessed by Connectors, Routing Service, and Routing Admin. Metrics Service leverages the In Memory Data Grid architecture to provide high availability and scalability. The Metrics Service receives data from external Connectors. Connectors are any external components that send metrics to the Dynamic Routing Service. The Connectors collect data from the Automatic Call Distribution (ACD) Systems. Metrics Service enables connectors to automatically create Agent Group entities in Dynamic Routing. For more information, see [System Properties Overview](#)

---

## Metrics Information

Routing Admin displays metrics data and status to end users. Metrics Service populates the space with Metrics values and their last updated time. It means whenever a component uses a Metrics object, the component has access to the age of that specific metric. The age information is specifically useful when customers write business scripts and need to consider the age of the metric in making decisions. The metrics data depicts the status of the Automatic Call Distribution (ACD) System. The Routing Admin screen displays the Metrics Status that displays the percentage of ACDs that cannot be considered while Dynamic Routing works out the routing decision. The semaphores depict the percentage range for metrics that are stale for an ACD.

Semaphore Color	Stale percentage
 Red	80 and more, that is, only 20% or less ACDs can be considered by Dynamic Routing for the routing decision.
 Yellow	More than 40% but less than 80%, that is, 40% to 80% of ACDs can be considered by Dynamic Routing for the routing decision.
 Green	Less than 40%, that is, at least 60% of the ACDs can be considered by Dynamic Routing for the routing decision.

Different ACD product or vendor combinations can be supported by developing and integrating ad hoc connectors through Avaya Professional Services engagement.

The CMS Connector is available out of the box with Dynamic Routing and the CMS connector provides metrics retrieved from Avaya CM through Avaya CMS reports. The Avaya CMS reports are created by Contact Center personnel and may have different types of skill metrics. CMS collects real-time information of CM. For example, the number of ongoing calls, number of agents, and Estimated Wait Time (EWT). CMS sends the information to the CMS Connector using the RT\_SOCKET format.

---

## Counters

Counters keep a count of the number of times a specific event occurs. Real-time counters can track data such as the number of times traffic is routed to a destination in a particular time interval.

Dynamic Routing supports two types of counters.

- Fixed window counters: These counters collect values over a fixed time. For example, Total of the Day collects data for the entire day, that is, 12:00 a.m. to 11:59 p.m. Dynamic Routing resets this counter value to 00 at 12:00 a.m.
- Moving window counters: These counters collect values for a time interval that moves along the time line. When a new value is added, the oldest value of the counter is removed. For example, Last Thirty (30) Minutes collects data for the last 30 minutes.

Dynamic Routing maintains a counter for each destination in the system. When Routing Service selects a destination, it creates a counter if a counter is nonexistent and increases the value of the counter. When the destination is removed from Routing Admin, the counter is removed.

---

## Routing Service

Interactive Voice Response (IVR) systems or other multi-channel platforms send a Routing Request to Routing Service for a particular interaction over a voice channel or any other channel or media. As a response, Dynamic Routing clients get a Routing Decision that specifies where to send the interaction. The Routing Decision depends on the interaction and caller, Time of Day (ToD) or Day of Week (DoW), and Routing Strategy defined in the Dynamic Routing configuration.

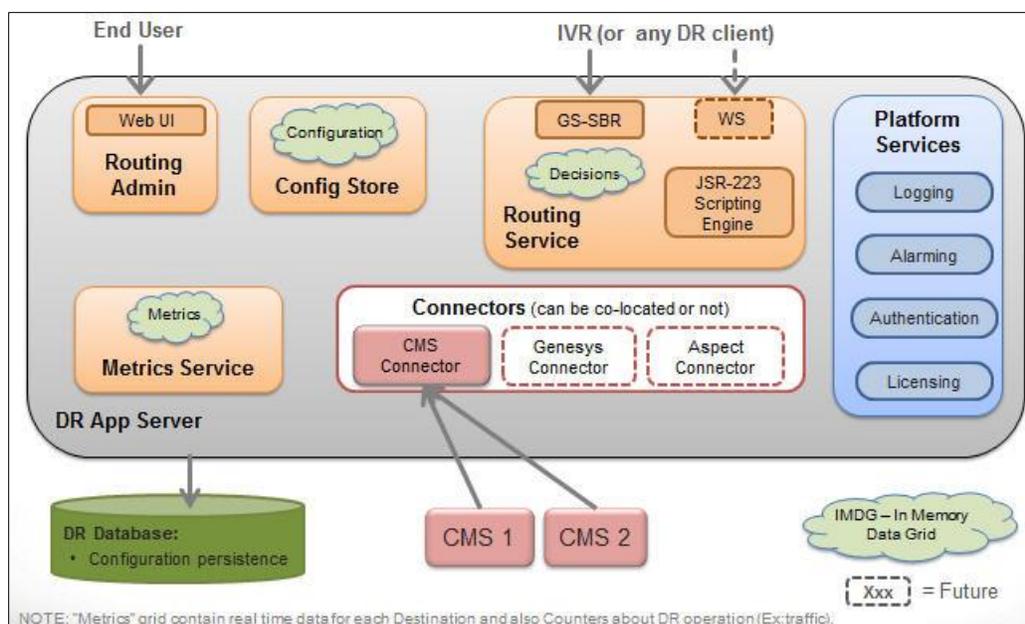


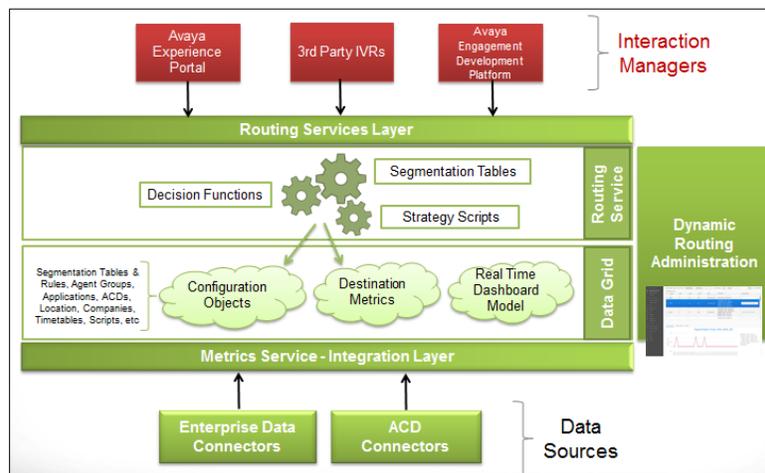
Figure 3: Component overview of Dynamic Routing

## Dynamic Routing features

Various features are available for administrators and script writers to help them define the routing logic in the routing scripts. The following routing scripts can be used in the decision process without restarting or deploying any component.

- Segmentation Feature:** Helps the user use Business Rules to map a list of call attributes to a specific classification of calls called Segments. The business attributes are called Dimension. Some Contact Center solutions also refer to business attributes as service or skill set. A service or skill set determines the minimum agent skill required to handle a call. Dynamic Routing users use the Segmentation Tables to map the attributes (dimensions) to segments.
- Destination Selection Feature:** Helps the user to run a custom Strategy script to select the best destination to route the call. Dynamic Routing selects this destination based on comparing criteria. The criteria for destinations can include a wide number of variables such as real time variables, real time metrics, and regulatory limits defined as global properties.
- Context Store Feature:** Gives the routing logic access to Context Store (CS) from Dynamic Routing scripts. For example, Context Store can contain call-related data, written by the Avaya or third-party Interactive Voice Response (IVR) system. Routing logic can gain access to and use the data to make decisions. The CS connectivity details are configured as Routing Service properties. <This feature is under development>

- **Metrics Service feature:** Allows the routing logic to retrieve Metrics data and use it in the routing scripts. The most common case is to obtain metrics from different Agent Groups provided by Connectors. However, the routing logic can also obtain Dynamic Routing calculated metrics, such as Counters.
- **Config Store feature:** Allows the scripting logic to obtain entities such as, Agent Group, Application, and Automatic Call Distribution (ACD) from the Dynamic Routing Configuration Store repository, The Configuration Data Model (CDM) contains all elements that the users define to operate the system. These entities are used in the routing logic.
- **REST Admin API:** A REST web service that enables an external system to retrieve, insert, delete, or modify DR configuration entities.
- **Commons feature:** Helps implement functions related to Logging and Alarming.



**Figure 4: Dynamic Routing network topology**

Figure 5 depicts a high-level call flow that includes all Avaya products. However, the call flow is the same even with third-party IVRs and ACDs. Dynamic Routing is involved in Steps 4 and 5.

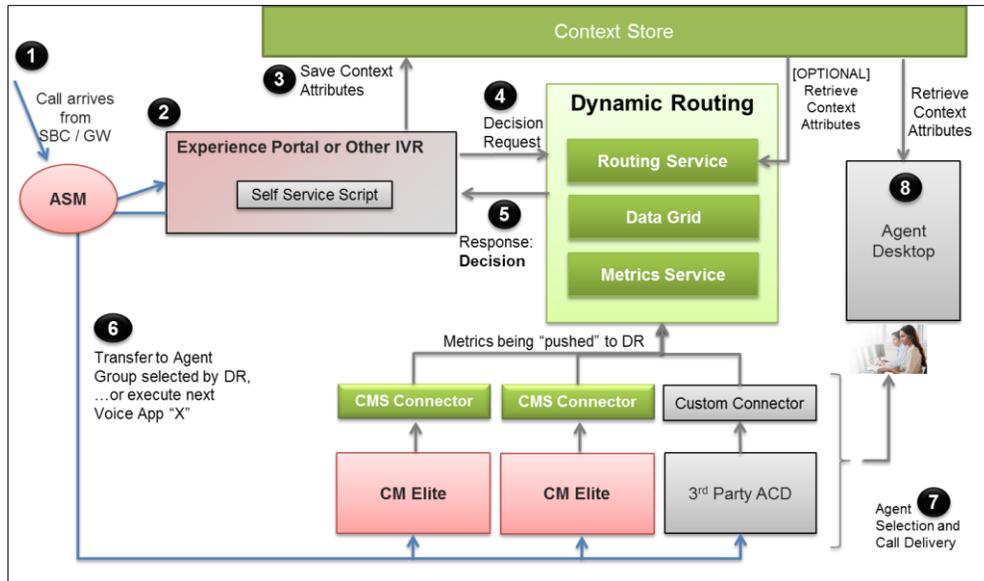


Figure 5: High level call flow

## High-level call flow steps

1. A new interaction arrives at the Contact Center. Session Manager directs it to Avaya Experience Portal.
2. The Self Service program running on Experience Portal identifies the caller and queries the back-end systems.
3. Data collected, represented as key-value attributes, can be saved in Context Store. The interaction context attributes can be used later for screen pops or any other Contact Center application.

**\* Note**

From the Dynamic Routing perspective, this step is optional. The reason is that Dynamic Routing can receive the segmentation information in the routing request, or it can retrieve the segmentation information from Context Store.

4. When the caller requests assisted service, the client application sends a Routing Request to Dynamic Routing. The Dynamic Routing client provides an Interaction ID, which is a unique identifier for the interaction, and the set of segmentation attributes collected so far during the interaction. In typical AAEP scenarios, the Interaction ID can be the UCID generated either by the SBC or AAEP.
5. Routing Service packs the information about the selected Destination and returns it to the client in a Routing Decision. Routing Service also preserves the appropriate statistics about the Decision for reporting purposes. Dynamic Routing applies some predefined configuration and executes a strategy script to compare all possible Destinations for the interaction to pick the best one.

6. The Dynamic Routing client application can then execute the action indicated in the Dynamic Routing response. For example, transferring of the call to the specific agent group selected by Dynamic Routing or execution of Voice App X. When the Dynamic Routing client is an OD Voice App, the application controls when to use Blind Transfer or Consultative Transfer, depending on the solution architecture.
7. The call lands in an Automatic Call Distribution (ACD) System. Depending on the ACD queue criteria configuration, the call is transferred to the next available agent. While waiting for an agent to become available, the ACD capabilities are used to provide wait treatment.
8. When the agent receives the call, the Agent Desktop application can get context attributes from Context Store for screen pop or look for more back-end data. The screen pop and desktop design is outside the scope of this offer document.

# Chapter 3: Getting Started

---

## Logging into the Routing Administration application

### About this task

If you enter a wrong user name or password, the system displays an incorrect login message. If you make multiple unsuccessful login attempts, your account can get locked. Contact your administrator to reset the user name.

### Before you begin

Ensure that the Google Chrome web browser is installed.

### Procedure

1. Start the browser.
2. In the address bar, type the URL of the Routing Administration application and then press **Enter**.  
The browser displays the Routing Administration application login page. The format for the Routing Administration URL is: <http://IP Address:port>/dr\_routingadmin\_pu. For example, [http://10.130.89.38:8080/dr\\_routingadmin\\_pu/](http://10.130.89.38:8080/dr_routingadmin_pu/) is a Routing Administration application URL where 10.130.89.38 is the IP Address and 8080 is the port.
3. In the **Username** and **Password** fields, enter your user name and password.
  - \* **Note:**  
dradmin user is forced to change the password upon their first login. To know more about changing the password and password complexity rules, see [Changing the password](#).
4. Click **Login**.  
The system displays the **Home** page. The Home page provides a synopsis of the order in which DR3 entities could be configured. This is to provide a guideline for new users.

Welcome to DR3 Administration !

**Introduction:**

In this application you can configure all the business rules for the DR3 Decision Engine.

The operations you are allowed to execute depend on the Role assigned to you. In case you are unable to see any of the configuration elements mentioned here, please ask a System Administrator to check the Permissions for your Role.

The basic DR3 configuration is used every time DR3 clients invoke the out of the box Decision Function (Standard\_DF) indicating a specific Segmentation Table name.

A Segmentation Table is a set of Segmentation Rules which identify each type of interaction and select the best decision for each one.

Each type of interaction (ex: sales-product-A) is recognized and handled by DR3 as a "Segment" or Segmentation Rule, consisting of:

- A set of Dimensions and their values (a.k.a. business attributes), such as "service=sales; product=A; language=English"
- An outcome or treatment for that segment, which is normally a list of possible Destinations, and the Strategy Settings the system will use to select one of these Destinations.

**Figure 6: Home page – Introduction**

**Quick Steps to create a new configuration:**

Before you can fully configure each Segmentation Rule, you need to configure Destinations and Strategy Settings:

- Destinations can be either Applications, Agent Groups (a.k.a. Queues, CM Skills) or Services. Please refer to the User Guide for more information on Services which are beyond the basic setup.
- Strategy Settings are the settings for any of the Canned Strategy Scripts: Percent Distribution, Dynamic Balance or Preferred Selection. When choosing a Strategy Script, like Percent Distribution, you will need to define a Timetable .

The following sequence can help you create an end to end configuration:

1. Create a Segmentation Table:
  - Define the Dimensions you will use to characterize the different segments (rows, Segmentation Rules) in the table.
  - Create Segmentation Rules in the Segmentation Table. Leave the Destination List and Strategy columns (on the right) empty at this point.
2. Create your Destinations:
  - If you need to use Applications, they can be created right away.
  - If you need Agent Groups, you first need to create the Companies, Locations and ACDs that your Agent Groups will be associated to. After the Companies, Locations and ACDs are created, you can create as many Agent Groups as actual Queues/Skills you have in the ACDs.
3. Create Strategy Settings:
  - Create one of these elements for each Segmentation Rule in your Segmentation Table. Later you will be able to consolidate multiple segments using the same Strategy Settings object, if you prefer to.
  - Choose any Canned Strategy script you want to use for Destination Selection. If you are not sure which one, use the Preferred Selection Strategy which has the simplest configuration options.
  - Leave all default values for any Script Variables, and choose a Timetable if you need to (only if you chose the Percent Distribution strategy).
4. Go back to the Segmentation Table, and for each Segmentation Rule (row)
  - Select a Strategy Settings object on the right most column. The Strategy Setting you select will drive your configuration restrictions on the Destination List.
  - Populate the Destination List by double clicking the corresponding cell of the table.

NOTE: when using a Segmentation Table,

- The mouse right click operation on the Destination List cell will give you quick access to Global Properties for each Destination on your list.
- The mouse right click operation on the Strategy Settings cell will give you quick access to Script Variable values on each element created in step #3 above.

**Figure 7: Home page – Quick steps for creating configuration**

# Dynamic Routing Administration application

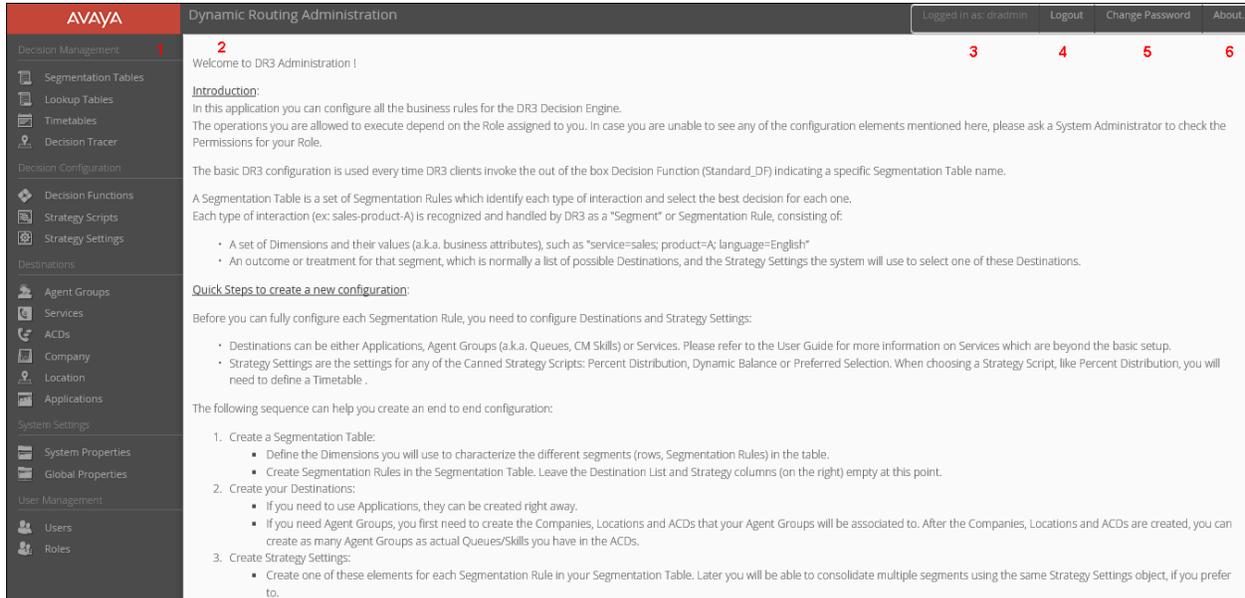


Figure 8: Dynamic Routing application home page

## User Interface elements field descriptions

No.	User interface element	Description
1.	Menu of icons and entities.	Displays the entities that the user can access.
2.	Dashboard or display area	Displays the application dashboard or details of the option selected in the left menu bar.
3.	Logged as: dradmin	Displays the user name that is logged in.
4.	Logout	Logs out the user from the Dynamic Routing application.
5.	Change password	Changes the password.
6.	About...	Displays the information about Dynamic Routing such as version, license mode, and feature.
7.	Navigation buttons (Home, Previous, Page: 1 / 3, Next, End)	Navigates to previous and next pages.

8.		Displays the number of items per page. You can choose to display 25, 50, or 100 items per page.
----	---	---

## Logging out of the Routing Administration application

### Procedure

On the top right of the page, click **Logout**.

## Licenses

Licensing in Dynamic Routing is based on the WebLM licensing system. The license grants Routing Service with an on or off license feature. The Routing Service checks the license when the best destination is determined. Dynamic Routing has a cache for the state of the license. If a license is modified in the WebLM Server, Dynamic Routing detects the license change only after the cache has expired after 10 minutes. The license is then reacquired from the WebLM Server.

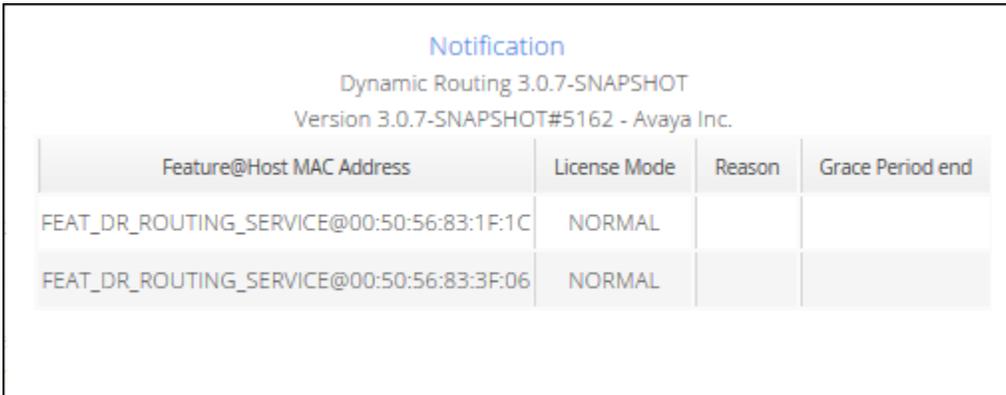
Routing Admin shows the following details about the state of the license:

- License Mode: NORMAL, ERROR indicates that the grace period for Dynamic Routing 3 is active, RESTRICTED.
- Expiration Date: The expiration date is displayed if the mode is ERROR.

## Viewing the Dynamic Routing license details

### Procedure

1. On the top right of the page, click **About**.  
The system displays the License details notification.



Notification			
Dynamic Routing 3.0.7-SNAPSHOT			
Version 3.0.7-SNAPSHOT#5162 - Avaya Inc.			
Feature@Host MAC Address	License Mode	Reason	Grace Period end
FEAT_DR_ROUTING_SERVICE@00:50:56:83:1F:1C	NORMAL		
FEAT_DR_ROUTING_SERVICE@00:50:56:83:3F:06	NORMAL		

**Figure 9: Dynamic Routing license details window**

2. To close the notification, press **Esc** or click on the license details screen.



# Chapter 4: Managing Decision Functions

---

## Overview

Decision Configuration includes the creation of a Decision Function (DF).

Decision Functions are the entities in the Dynamic Routing system that define a starting point for making a routing decision, based on inputs and the routing logic. Decision Functions are used to build a decision that determines where to send the interaction next. A decision can be of the form “Transfer to Agent Group X” or “Play Application X”.

Main input for a Decision Function instance is a `RoutingServiceRequest` that contains the following information:

- Decision Function Name: If a Decision Function name is not provided, a default Decision Function is used.
- Named parameters: For example, Interaction ID.
- Custom parameters: Key and value pairs that the Interaction Manager provides.
- Segmentation attributes: Key and value pairs that the Interaction Manager provides.

---

## Dynamic Routing features

A Decision Function is implemented using a script with a high-level scripting language called Groovy. Within the Decision Function, different Dynamic Routing features such as Segmentation and Destination Selection are used. The following series of high-level objects that represent the different Dynamic Routing features are available to the script writer:

- Context Store Feature
- Config Store Feature
- Metrics Feature
- Destination Selection Feature
- Segmentation Feature

Each feature has the following information:

- Name: Each feature is introduced to the Decision Function writer with a name.
- A well-defined API: For example, inputs, operations, and outputs.

---

## Routing Decision Object

The outcome of the execution of a Decision Function script is called a Routing Decision object. The key content of the Routing Decision object is the following:

- A resultCode to indicate if the routing logic has successfully picked a Destination or an error has occurred.
- The selected Destination which allows Decision Function to accumulate statistics about the traffic distribution.
- The selectedDestAddress  
Each AgentGroup can be accessed through different addresses for example Volvo Dealer Networks in Avaya CM world, or SIP URIs in other platforms.

 **Note**

- The Decision Function script populates the final address to be used by the Interaction Manager to transfer the contact.
- If an Application destination is selected, only one address is expected.

---

## Creating a Decision Function

### About this task

Dynamic Routing has a set of Decision Function scripts stored. When the user creates a Decision Function, the user can use the available scripts. To use the Decision Function scripts, already available in Dynamic Routing, the user un-comments the lines of code of the script.

Decision Function now also includes Version number, Maturity Status, and Usage Status. Some main features of the mentioned fields are:

- Decision Functions can now also be identified by Version number.
- Decision Functions can go live only if the Maturity Status is APPROVED.
- Decision Functions are not editable if the Usage Status is LIVE.
- Routing Requests use the same interfaces as before however, DR3 looks for the Decision Function that is in LIVE Usage Status.
- If there is no Decision Function in LIVE status, an error is returned.
- After upgrade, ensure production Decision Functions are in LIVE status.

### Procedure

1. In the left panel, in **Decision Configuration**, click **Decision Functions**.  
The system displays the Decision Function table.
2. Click **Add** ().
3. In the **Decision Function Name** field, enter the Decision Function name.  
The Decision Function name must be unique.
4. In the **Maturity Status** field, click the required Decision Function status.
5. In the **Usage Status** field, click the required Decision Function status.
6. In the **Version** field, type the appropriate Decision Function version number.

7. In the **Decision Function Description** field, enter the Decision Function description.
8. Click **Upload**.
9. Select the file that has the script for the Decision Function.
10. Click **Upload**.  
The Decision Function script panel displays the script that you uploaded. The user interface for editing a Decision Function provides a way to load a script file and edit it manually. This editor, at this point, provides highlighting of the Groovy programming language, but there is still no validation of the script that the user submits.
11. (Optional) Select the **Default** check-box to set a Decision Function script as the default script.  
The Routing Service client includes a Decision Function Name parameter to indicate the script that the user wants to run. If the Decision Function Name parameter is empty, then Dynamic Routing uses the default Decision Function. The default Decision Function shipped with DR3 is called **Standard\_DF**.
12. Click **Save**.  
The Decision Function page displays the new Decision Function in the list.

---

## Deleting a Decision Function

### Procedure

1. In the left pane, in **Decision Configuration**, click **Decision Functions**.  
The system displays the Decision Functions table.
2. Click the row for the Decision Function that you want to delete.
3. Click **Delete** ().  
The system displays the confirmation dialog box.  
**Note:** You cannot delete a hidden row.
4. Click **Accept**.

---

## Modifying a Decision Function

### Procedure

1. In the left pane, in **Decision Configuration**, click **Decision Functions**.  
The system displays the Decision Functions table.
2. Double-click the row for the Decision Function that you want to modify.
3. On the Edit Decision Function screen, update the following fields:
  - a. **Decision Function Name**
  - b. **Maturity Status**.
  - c. **Usage Status**
  - d. **Version**
  - e. **Decision Function Description**
4. In the **Decision Function Script** section, update the lines of the script.
5. Click **Save**.

## Decision functions fields descriptions

Name	Description
<b>Name</b>	The name of the Decision Function.
<b>Maturity Status</b>	<p>The maturity status of the Decision Function. The options are:</p> <ul style="list-style-type: none"> <li>• <b>DEV</b>: Used for the Decision Function script under development.</li> <li>• <b>TESTING</b>: Used for the Decision Function script under test.</li> <li>• <b>APPROVED</b>: Used for the Decision Function script ready to go live.</li> </ul>
<b>Usage Status</b>	<p>The current environment under which the decision function is being used. The options are:</p> <ul style="list-style-type: none"> <li>• <b>TEST</b>: Used for the Decision Function script undergoing testing.</li> <li>• <b>LIVE</b>: Used for the Decision Function script which is live and in production environment.</li> <li>• <b>DEPRECATED</b>: Used for the Decision Function script that is no longer in use.</li> </ul>
<b>Version</b>	The version of the Decision Function script.
<b>Decision Function Description</b>	The description of the Decision Function.
<b>Default</b>	The default value of the Decision Function Variable
Decision Function Script panel	The Decision Function script panel displays the script that you uploaded. The user interface for editing a Decision Function provides a way to load a script file and edit it manually. This editor, at this point, provides highlighting of the Groovy programming language, but there is still no validation of the script that the user submits.

## Button descriptions

Button	Description
<b>Search</b>	<p>Searches for the Decision Function that the user has entered.</p> <p><b>* Note</b></p> <p>The search filter used is saved when navigating away from the selected tab, until logs are cleared or session is closed. This functionality is not applicable for <b>System Properties</b> and <b>Global Properties</b>.</p>
<b>Add</b> (  )	Adds a new Strategy Script record.
<b>Delete</b> (  )	Deletes a Strategy Script record.
<b>Upload</b>	Uploads a Decision Function script from the system.

# Chapter 5: Segmentation Tables

---

## Overview

In Dynamic Routing, Segmentation Management includes creation and administration of Segmentation Tables, Segmentation Rules, Dimensions, and Destination Aliases. The segmentation feature is one of the decision steps coordinated from the Decision Function.

---

## Elements of Segmentation Management

- **Segmentation Table:** Represents a set of Segmentation Rules that help partition the interactions. For example, Dynamic Routing classifies calls into segments so that each segment is best managed and optimally routed.
  - **Segmentation Rule:** Compares various attributes of an interaction, such as a call, to determine what type of call it is.
  - **Dimension:** Represents one attribute to differentiate a call from other calls. Usually, several dimensions are used to define a segment. Dimensions can be the characteristics that a Contact Center uses to define call types. A Dimension can be a product line, language, or customer loyalty score. With the help of Dimensions and comparative logic, Segmentation rules help identify a certain type of call and then the follow-on Strategy and Destinations that should be considered in routing the call.
  - **Destination:** Represents a possible target where an interaction can be sent to, for example Agent Group, Application, or Service.
  - **Destination Alias:** Represents a tag to indicate the purpose of such Destination. The tag helps the user map potential Destinations, when scripts are reused.
  - **Strategy:** Represents a strategy script and variables that help deliver the Destination Selector feature. The Destination Selector feature determines the best destination to route an interaction such as a call to.
- 

## Uses of Segmentation Tables

Segmentation Tables are used to define a set of Segmentation Rules that compare the input parameters gathered from the routing request. Based on the parameters collected, the Segmentation Tables calculate a segmentation result. The segmentation result can be a single Destination or multiple possible Destinations. In case of a single Destination, the decision recommending the resultant Destination is returned immediately. In case of multiple possible Destinations, the outcome is a Strategy that determines the Destination suited best for the particular request.

---

# Creating a Segmentation Table

## Procedure

1. In the left panel, under **Decision Management**, click **Segmentation Tables**.  
The system displays a list of Segmentation Tables.
2. Click **Add** ().
3. Enter a name for the table.
4. Enter a description for the table.
5. In the **Dimensions** section, click **Add** () and do the following:
  - a. Type the name of the dimension.
  - b. Select the data type as Numeric or String or Lookup Table.
6. (Optional) Click **Delete** () to delete a dimension.
7. (Optional) Click **Up** or **Down** to reorder the list of dimensions.  
The order of the list indicates the precedence of the Dimension when segmentation rules are evaluated
8. In the **Min Destination Allowed** field, enter the minimum number of Destinations allowed.
9. In the **Max Destinations Allowed** field, enter the maximum number of Destinations allowed.
10. In the **Display Destinations**, select one of the following:
  - **Display Destinations count:** Displays the count of the destinations listed in the destination column of the segmentation rule.
  - **Display Destination Names & Destination Aliases, up to:** Displays the destination names and the maximum number of aliases up to which you want the destination names and aliases to be displayed.

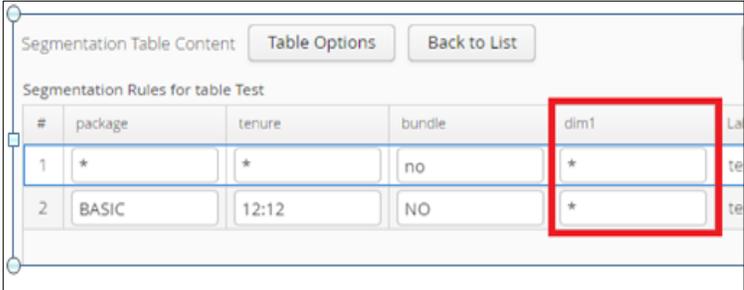
The number of destination aliases does not affect the routing strategy and the routing logic.
11. In the **Include Strategy** field, select one of the following:
  - **No Strategy:** If you do not want to include any strategy.
  - **Optional Strategy:** If you want to select a strategy or skip selecting a strategy.
  - **Mandatory Strategy:** If you want to include the strategy for all segment rules.
12. In the **Table Evaluation Mode** field, select one of the following:
  - **Row Priority Mode**
  - **Column Priority Mode**
13. Click **Save**.  
The system adds the new segmentation table in the list.

---

## Segmentation table field descriptions

Name	Description
------	-------------

Name	Description
<b>Name</b>	The name of the Segmentation Table.
<b>Description</b>	The description of the Segmentation Table.
<b>Last 30' Traffic</b>	The traffic in the last 30 minutes.
<b>Today Traffic</b>	The traffic noted on the current day.
<b>Clone</b>	Creates a duplicate copy of a Segmentation Table.

Name	Description
<b>Name</b>	The name of the Segmentation Table.
<b>Description</b>	The description for the Segmentation Table.
<b>Dimensions</b>	
<b>Dimension Name</b>	<p>The name of the Dimension. Enter the name of the Dimension when you add a new Dimension.</p> <p><b>* Note:</b></p> <p>You can now delete a Segmentation Table Dimension column provided all the rules in the column have the values as asterisk (*) as shown in the following screenshot:</p> 
<b>Data Type</b>	The following are the types of data for the Dimension:

Name	Description
	<ul style="list-style-type: none"> <li>• String: String or text type dimensions supports string fields. The Text dimension type values are evaluated by the Equal to Operator "=". The Case Sensitive or Insensitive comparison option is configured through the Routing Service System Property. When the comparison value is "*" only the asterisk character, the asterisk is considered as the special operator "Any". The special operator means that the value of this Dimension can be anything, and is always considered as a match. For example, product="cable TV" state="*"</li> <li>• Numeric: Number type dimension supports numeric real number fields. Number type values are evaluated by a Range Operator, which combines two special characters, "*" and ":", as follows: Greater than X --&gt; X:* Lower than X --&gt; *:X Equal to X --&gt; X:X Any value --&gt; * 12:25 from 12 to 25 *:25 anything lower than 25 12:* anything greater than 12 For Example,</li> <li>• years="18:30" defines the range for years from 18 to 30.</li> </ul> <p style="margin-left: 40px;">* <b>Note</b></p> <p style="margin-left: 80px;">Dynamic Routing offers the following two types of Dimensions:</p> <ul style="list-style-type: none"> <li>• Lookup Table: A single Segmentation Attribute is used to look up and map to a Dimension (Lookup Table Name).</li> </ul> <p style="margin-left: 40px;">Examples:</p> <p style="margin-left: 80px;">Segmentation Attribute = Country could map to Dimension = Continent. Segmentation Attribute = Country could map to Dimension = Language</p> <p>Only unidimensional Lookup Tables are used as a Segmentation Table Dimension.</p>

Name	Description
<b>Min Destinations Allowed</b>	The minimum number of Destinations that are allowed. <p><b>Note</b></p> <p>To support experience selection, you can set minimum value as 0.</p>
<b>Max Destinations Allowed</b>	The maximum number of Destinations that are allowed.
<b>Display Destinations</b>	You can choose to display the information about Destinations such as the number of destinations, the name of the destinations and the destination aliases up to a limit. Select one of the following options to display information about Destinations in the Segmentation Table: <ul style="list-style-type: none"> <li>• Display Destinations count</li> <li>• Display Destination Names and Destination Aliases, up to</li> </ul>
<b>Include strategy</b>	You can choose to not include a strategy, an optional strategy, or a mandatory strategy. Select one of the following options: <ul style="list-style-type: none"> <li>• No Strategy</li> <li>• Optional Strategy</li> <li>• Mandatory Strategy</li> </ul> <p><b>Note</b></p> <p>To display <b>Strategy Settings</b> column in the <b>User Preferences</b> table, you must select <b>Optional Strategy</b> or <b>Mandatory Strategy</b>.</p>
<b>Table Evaluation Mode</b>	You can choose to represent segmentation evaluation in row mode or column mode. <ul style="list-style-type: none"> <li>• Row Priority Mode</li> <li>• Column Priority Mode</li> </ul>

---

## Button descriptions

Button	Description
--------	-------------

Button	Description
Add (  )	Adds a new Dimension to a Segmentation Table.
Delete (  )	Deletes a Dimension from a Segmentation Table.
Up	Reorders the list of Dimensions and move a dimension up in the list of Dimensions.
Down	Reorders the list of dimensions and move a Dimension down in the list of Dimensions.
Back to list	Navigates back to the list of Segmentation Tables.

---

## Segmentation Rule – evaluation and selection

The list of Segmentation Rules has a fixed order controlled by the user, in order to allow intuitive navigation of the Segmentation Table. The rules with precise values such as product = "cableTV" are evaluated first, whereas those with an asterisk "\*" (ANY) value are evaluated last, only if no 'precise' match has occurred.

A Segmentation Rule is selected when all the Dimensions match their criteria for that rule. The Routing Administration user can define the segmentation result that is the output. The user can define Possible Destinations: Agent Groups or Applications, Strategy (if applicable), and Label Name. For example, possible outcomes after a Segmentation Rule match could be:

- Transfer the call to an Agent Group.
- Transfer the call to an Application.
- Select a transfer target from a group of Destinations, without using a Strategy script.
- Select a transfer target from a group of Destinations, using a destination selection Strategy script.

These activities take place in different components of the Dynamic Routing system, but the Segmentation feature provides enough information for them.

The user can also edit the global properties associated to the Destinations involved in a Segmentation Rule.

---

## Adding a segmentation rule

### About this task

A frequent customer situation is for two or three call segments to differ only in a discrete set of values for a specific Dimension. The two call segments would likely share the same strategy, but Destinations could be different, such as when handling traffic from different states on regional CCs.

Example:

state=CA|WA|NV map to SegLabel=ServiceX-WEST

state=FL|GA|NC|SC|VA|PA|NJ|DE map to SegLabel=ServiceX-EAST

state=\* map to SegLabel=ServiceX-CTMT

In this example, the "|" character is acting as an OR operator, in order for the state Dimension to support a list of values, instead of forcing customer to define a separate row for each individual state.

### Procedure

1. In the left panel, under **Decision Management**, click **Segmentation Tables**.  
The system displays a list of Segmentation Tables.
2. Double-click a row to edit an existing Segmentation Table.  
The system displays a list of segmentation rules.
3. Click **Add** ().  
The system displays the New Segmentation Rule window.
4. For each dimension, type the respective values.
5. Click **Save**.

---

## Adding a destination in the Segmentation rule

### About this task

Once you add a Segmentation Rule, the rule gets added in the list for the respective Segmentation Table. Here, you will see a **Destinations** column with a button - **Click to Add**. You must add the Destinations for the selected rule based on the minimum and maximum Destination settings for the respective destination table.

### Procedure

1. In the left panel, under **Decision Management**, click **Segmentation Tables**.  
The system displays a list of Segmentation Tables.
2. Double-click a row to edit an existing Segmentation Table.  
The system displays a list of segmentation rules.
3. In the **Destinations** column, double-click **Click to Add** for the desired segmentation rule.  
The system displays a selection panel window with the list of Available Destinations.
4. In the **Available Destinations** List, select a Destination, and click **Add** ().  
The system adds the destination in the Selected Destination list.
5. In the **Selected Destinations** list, click the **Destination Alias** drop-down and select the required alias.

- Repeat step 4 and step 5 based on your requirement and as per the minimum maximum Destination limitations set for the respective Segmentation Table.

✳ **NOTE**

Once you add all destinations as per the settings, the **Destinations** column text color for the respective rule changes from red color, which means the system requires your attention, to the default color, which means a successful addition.

- Click **Save**.  
The system adds the selected destination/s in the respective segmentation rule destination list.

---

## User Preferences for Segmentation Table

### About this task

A user can choose which columns to see or hide. You can resize a column or re-order a column by dragging it over.

### Procedure

- In the left panel, under **Decision Management**, click **Segmentation Tables**.  
Dynamic Routing displays a list of Segmentation Tables
- Double-click a row to edit an existing Segmentation Table  
A list of Segmentation Rules is displayed.
- Click the **Settings** (⚙) icon located in the right corner of a rule entry.  
The system displays the Strategy Settings dialog box.
- From the list, click the preferences that you want to hide.  
The system hides the segmentation rule that you selected.

✳ **Note:**

Now, you can also select the **Strategy Settings** option as a column preference. You can also create New Strategy Settings from this dialog box. Additionally, a Strategy Settings created using a Segmentation Table is specific to the given Segmentation Table. If you delete a Segmentation table, the Strategy Settings defined within the Segmentation table are also deleted. The Strategy Settings created directly from the **Decision Configuration > Strategy Settings** page are not visible in Segmentation Tables.

- Click **Preferences**.
- Click **Save**.

---

## Deleting a Segmentation Table

### Procedure

- In the left panel, under **Decision Management**, click **Segmentation Tables**.  
The system displays a list of Segmentation Tables.
- Double-click the row of the Segmentation Table that you want to delete.
- Click **Delete** (🗑).  
The system displays the confirmation dialog box.

4. Click **Accept**.  
The system deletes the selected table from the list.

---

## Modifying a Segmentation Table

### Procedure

1. In the left panel, under **Decision Management**, click **Segmentation Tables**.  
The system displays a list of Segmentation Tables.
2. Double-click the row of the Segmentation Table that you want to modify.
3. In the Segmentation Rules table, click the row you want to modify the Segmentation Rule.
4. Click **Back to List** to return to the list of Segmentation Tables.
5. (Optional) Click **Table Options** to change the table options.
6. Change the Name and Description of the table.
7. Change the Minimum Destinations allowed and the Maximum Destinations allowed.
8. Select one of the following options for the **Display Destinations**:
  - **Display Destination count**: Display the count of the destinations listed in the destination column of the segmentation rule.
  - **Display Destination Names & Destination Aliases, up to**: Enter the destination names and aliases up to which you want the destination names and aliases to be displayed  
The number of destination aliases does not affect the routing strategy and the routing logic
9. **Include Strategy** field, click to select one of the following options:
  - **No Strategy** if you do not want to include any strategy.
  - **Optional Strategy** if you want to select a category or skip selecting it.
  - **Mandatory Strategy**, to include the strategy for all segment rules.
10. Click **Save** to save the Segmentation Table.

---

## Cloning a Segmentation Table

### About this task

Cloning tables improves usability of the product and reduces time for configuration especially during initial set-up of the product when many similar tables may need to be created.

### Procedure

1. In the left panel, in **Decision Management**, click **Segmentation Tables**.  
The system displays a list of Segmentation Tables.
2. Click the row of the Segmentation Table that you want to copy.
3. On the top right of the page, click **Clone**.  
The system displays the Enter the new Segmentation Table name window.
4. In the **Cloned Table Name** field, type a name.
5. Click **Accept**.

For more information on Traffic, see [Viewing the traffic for a Destination](#).



# Chapter 6: Working with Strategy Settings and Strategy Scripts

---

## Overview

Routing Admin makes it possible to create and edit Strategy Settings and Strategy Scripts. A single Strategy Script can be used by more than one Strategy Setting.

---

## Creating a Strategy Setting

### Procedure

1. In the left panel, under **Decision Configuration**, click **Strategy Settings**.  
The system displays the Strategy Settings table.

 **Note**

Strategy Settings created from this page are not visible in Segmentation Tables. Strategy Settings created using a Segmentation Table are specific to the given Segmentation Table. If you delete a Segmentation table, the Strategy Settings defined within the Segmentation Table are also deleted.

2. Click **Add** ().
3. On the Edit Strategy Settings page, enter the **Name** of the strategy.
4. Click to select the **Strategy Script**.
5. Enter the **Description** of the strategy.
6. Click to select the **Timetable**.
7. Click **Save**.  
The Strategy Settings page displays the new strategy settings.

---

## Strategy Settings field descriptions

Name	Description
Name	The name of the Strategy Setting.
Strategy Script	The Strategy Script that is selected.

Name	Description
<b>Description</b>	The description of the Strategy Setting.
<b>Timeindependent values</b>	This section lists the values that are independent of time. For example, Per Destination Variables

Name	Description
<b>Name</b>	The name of the Strategy Setting.
<b>Strategy Script</b>	The name of the Strategy Setting
<b>Description</b>	The description of the Strategy Setting.
<b>Timetable</b>	The name of the Timetable.
<b>Per Interval Variables</b>	Supports multiple values, one for each Timetable Interval Name defined.
<b>Per Destination and Interval Variable</b>	Supports multiple values, it is bi-dimensional, values are set per Destination Alias defined in the Strategy Script, and for each alias, per Interval Name defined in the associated Timetable.

## Button descriptions

Button	Description
<b>Save</b>	Saves the Strategy Setting record.
<b>Close</b>	Closes the Edit Strategy Setting window.

---

## Deleting Strategy Settings

### Procedure

1. In the left panel, in **Decision Configuration**, click **Strategy Settings**.  
The system displays the Strategy Settings table.
2. Click the row of the Strategy Setting that you want to delete.
3. Click **Delete** ().  
The system displays a confirmation message.
4. Click **Accept**.  
The system displays a confirmation message.

If a Strategy Setting is being used by a Segmentation Table, then the Dynamic Routing application displays a message that the strategy settings cannot be removed.

---

## Modifying Strategy Settings

### About this task

Strategy setting can be modified from Strategy setting in Decision Management or using the context menu on the Segmentation Rules view. Do the following to modify the strategy settings.

### Procedure

1. In the left panel, in **Decision Configuration**, click **Strategy Settings**.  
The system displays the Strategy Settings table.
2. Double-click the row of the Strategy Setting that you want to change.  
The Edit Strategy Settings page is displayed.

**Note:** You can only change the name and the description of the Strategy Setting.

3. Edit the field that you want to change.
4. Click **Save**.  
The system displays the list of Strategy Settings with the modified properties.
5. To modify the Strategy Setting for a particular rule using the context menu, do the following:
  - a) Right-click on the Strategy Settings column for a particular rule.
  - b) Click on the Strategy Settings.  
The Edit Strategy Setting window is displayed.
  - c) Edit the required fields.

When you open the Strategy Setting using the context menu you can also see the actual Destination names associated with the Destination Aliases for a particular rule. This is useful to make adjustment for the values of PerDestination and PerDestination Interval variables.

The Strategy Settings are associated to each Segmentation Rule, and contains a list of Script Variable values. Some of these values are specific to certain Destinations that is SV type = perDestination or perIntervalDestination.

---

## Creating Strategy Scripts

### Procedure

1. In the left panel, under **Decision Configuration**, click **Strategy Scripts**.

The system displays the Strategy Scripts table.

2. Click **Add** ().
3. On the **Edit Strategy Scripts** page, click **Script Definition**.
4. Click **Upload**.
5. Navigate to the file that has the script for the Strategy.
6. Click **Open**.  
The Strategy Script panel displays the script that you uploaded. The user interface for editing a Strategy Script provides a way to load a script file and edit it manually. The editor highlights the Groovy programming language, but there is still no validation of the script that the user submits.
7. Click **Strategy Meta-Data**.
8. In the **Strategy Script Name**, enter a script name.

The name must be unique.

9. In the **Maturity** field, click the required Strategy Script status.
10. In the **Usage** field, click the required Strategy Script status.
11. In the **Version** field, type the appropriate Strategy Script version number.
12. In the **Strategy Script Description**, type a script description.
13. To add a destination aliases, click **Add Destination Aliases**
14. To add script variable, click **Script Variables**.
15. Click **Add Script Variable**.
16. Click **Save**.

The Strategy Script page displays the new Strategy Script in the list.

For information on Strategy Scripts fields and buttons, see [Strategy Scripts fields and button descriptions](#)

---

## Strategy Scripts fields and button descriptions

Name	Description
<b>Strategy Script Name</b>	The name of the Strategy Script.
<b>Maturity</b>	The maturity status of the Strategy Script. The options are: <ul style="list-style-type: none"><li>• <b>DEV</b>: Used for the Strategy Script under development.</li><li>• <b>TESTING</b>: Used for the Strategy Script under test.</li><li>• <b>APPROVED</b>: Used for the Strategy Script ready to go live.</li></ul>
<b>Usage</b>	The current environment under which the Strategy Script

Name	Description
	<p>is being used. The options are:</p> <ul style="list-style-type: none"> <li>• <b>TEST</b>: Used for the Strategy Script undergoing testing.</li> <li>• <b>LIVE</b>: Used for the Strategy Script which is live and in production environment.</li> <li>• <b>DEPRECATED</b>: Used for the Strategy Script that is no longer in use.</li> </ul>
<b>Version</b>	The version of the Strategy Script.
<b>Strategy Script Description</b>	The description of the Strategy Script.

## Button descriptions

Button	Description
<b>Search</b>	<p>Searches for the Strategy Script that the user is looking for.</p> <ul style="list-style-type: none"> <li>• <b>Note</b> The search filter used is saved when navigating away from the selected tab, until logs are cleared or session is closed. This functionality is not applicable for <b>System Properties</b> and <b>Global Properties</b>.</li> </ul>
<b>Add</b> (  )	Adds a new Strategy Script record.
<b>Delete</b> (  )	Deletes a Strategy Script record.
<b>Clone</b>	Creates a duplicate copy of a Strategy Script.
<b>Upload</b>	Uploads a Strategy Script from the system.

## Edit Strategy Script fields and button description

Name	Description
<b>Script Definition</b>	Displays the code that defines the script logic.
<b>Strategy Meta-Data</b>	
<b>Strategy Script Name</b>	The name of the Strategy Script.
<b>Maturity</b>	<p>The maturity status of the Strategy Script. The options are:</p> <ul style="list-style-type: none"> <li>• <b>DEV</b>: Used for the Strategy Script under development.</li> <li>• <b>TESTING</b>: Used for the Strategy Script under test.</li> <li>• <b>APPROVED</b>: Used for the Strategy Script ready to go live.</li> </ul>
<b>Usage</b>	<p>The current environment under which the Strategy Script is being used. The options are:</p> <ul style="list-style-type: none"> <li>• <b>TEST</b>: Used for the Strategy Script undergoing testing.</li> <li>• <b>LIVE</b>: Used for the Strategy Script which is live and in production environment.</li> <li>• <b>DEPRECATED</b>: Used for the Strategy Script that is no longer in use.</li> </ul>
<b>Version</b>	The version of the Strategy Script.
<b>Strategy Script Description</b>	The description of the Strategy Script.
<b>Destination Aliases</b>	
<b>Name</b>	The name of the Destination Alias.
<b>Size</b>	<p>The size of the Destination Alias that suggests if one or multiple destinations can be assigned per segmentation rule for the destinationAlias.</p> <p>For example, DestinationAliasSize.One depicts that only one destination can be assigned per segmentation rule</p>

Name	Description
	<p>for the destination alias.</p> <p>DestinationAlias.Many depicts that multiple destinations can be assigned per segmentation rule for the destination alias.</p>
<b>Mandatory</b>	Sets the condition if the Destination Alias is mandatory or not.
<b>Type</b>	<p>The type of Destination Alias. Select one of the following:</p> <ul style="list-style-type: none"> <li>• AGENT_GROUP</li> <li>• SERVICE</li> <li>• WAE_DOMAIN</li> <li>• APPLICATION</li> <li>• ANY. This option provides flexibility of configuring destination alias with a destination of any type: Agent Group, Application, WAE_Domain, or Service.</li> </ul>
<p><b>Script Variables</b></p> <p>When you edit the Script Variable details, you may get a warning about the usage of the selected script in the respective Strategy Script.</p>	
<b>Name</b>	The name of the Script Variable.
<b>Description</b>	The description of the Script Variable.
<b>Type</b>	<p>The type of Script Variable. For example, single value, or multiple values; multiple values can be of the following:</p> <ul style="list-style-type: none"> <li>• <b>PerDestination:</b> Supports multiple values, one for each Destination Alias defined in the strategy script.</li> <li>• <b>PerInterval:</b> Supports multiple values, one for each Timetable Interval Name defined.</li> <li>• <b>PerDestinationInterval:</b> Supports multiple values, it is bi-dimensional, values are set per Destination Alias defined in the Strategy Script, and for each alias, per Interval Name defined in the associated</li> </ul>

Name	Description
	<p>Timetable.</p> <ul style="list-style-type: none"> <li>• <b>SimpleVariable:</b> Supports single value and can be text integer string or a value from the option list.</li> </ul>
<b>Data Type</b>	The data type of the Script Variable such as, text, number, list.
<b>Validation</b>	<p>The validation for the Script Variable. The validation rule is based on the Data Type.</p> <ul style="list-style-type: none"> <li>• If the Data Type is <b>Number</b> then the Validation rule is defined by Minimum and Maximum number values for the Script Variable. For example, Min=1, Max=10, then the value allowed for the Script Variable on the Strategy Settings must be within the range 1 to 10.</li> <li>• If the Data Type is <b>Text</b>, Validation rule is defined by MinLength and MaxLength of the string.</li> <li>• If the Data Type is <b>OptionList</b>, the Validation rule is defined by the optionslist.</li> </ul>
<b>Default Value</b>	The default value of the Script Variable.

## Button descriptions

Button	Description
<b>Add Script Variable</b>	Click to add a new Script Variable row
<b>Delete Script Variable</b>	Click to remove the selected Script Variable from the list.
<b>Move Up</b>	Click to move up the selected Script Variable for early execution in the sequence.
<b>Move Down</b>	Click to move down the selected Script Variable for late execution in the sequence.

---

## Deleting Strategy Scripts

### Procedure

1. In the left panel, under **Decision Configuration**, click **Strategy Scripts**.  
The system displays the Strategy Scripts table.
2. On the Strategy Scripts page, click the row of the Strategy Script that you want to delete.
3. Click **Delete** ().  
The system displays a confirmation message.  
You cannot delete a hidden row.
4. Click **Accept**.  
The system deletes the selected script from the list.

---

## Modifying Strategy Scripts

### Procedure

1. In the left panel, under **Decision Configuration**, click **Strategy Scripts**.  
The system displays the Strategy Scripts table.
2. On the Strategy Scripts page, double-click the row of the **Strategy Script** that you want to change.  
The Edit Strategy Script page is displayed.  
  
You can change fields such as Name, Description, Strategy Script, and more.
3. Edit the field that you want to change.
4. Click **Save**.  
The Strategy Script page displays the list of Strategy Scripts with the modified properties.  
For information on Strategy Scripts fields and buttons, see [Edit Strategy Script fields and button description](#)

## Cloning Strategy Scripts

### About this task

Cloning tables improves usability of the product and reduces time for configuration especially during initial set-up of the product when many similar tables may need to be created.

### Procedure

1. In the left panel, under **Decision Configuration**, click **Strategy Scripts**.  
The system displays the Strategy Scripts table.
2. Click the row of the Strategy Script that you want to copy.
3. On the top right of the page, click **Clone**.  
The system displays the Enter the new Strategy Script name window.
4. In the **Cloned Strategy Script Name** field, type a name.
5. Click **Accept**.

---

## Destination Aliases

Users define a destination alias tag for every destinations candidate group and the Destination Alias defines the purpose of the destinations group. A destination alias represents a specific sub group of destinations.

---

## Script Variables

Add Script Variables including name, description, type (text, number, and list), validation rules, and default value. A script variable can have a single value, or multiple values. A script variable can have the following values:

- **PerDestination:** Supports multiple values, one for each Destination Alias defined in the strategy script.
- **PerInterval:** Supports multiple values, one for each Timetable Interval Name defined.
- **PerDestinationInterval:** Supports multiple values and is bi-dimensional. The values are set for every Destination Alias defined in the Strategy Script. For each alias an Interval Name is defined in the associated Timetable.
- **SimpleVariable:** Supports single value and can be text integer string or a value from the option list.

---

## Timetables

The Timetable entity provides a generic way to define time intervals which can be reused across the configuration of different features. For example, if there are three intervals in a week where traffic distribution is the same, then the user need not set up three different routing logics. The user can reuse the logic by defining three different intervals with different time From/To and Day of Week (DoW) and the same routing logic. The user must label all Intervals with similar traffic distribution under the same Name, and then define routing settings for that Interval Name only once.

---

## Timetable Date Definitions

The rows in a Timetable account for Date definitions. Each date contains:

- A name for easy reference to each row, such as "LaborDay" or "Weekend".
- In a Date definition which is either "Day of Week" or "Holiday", Holidays take precedence over Day of Week (DoW) entries. If the Timetable defines a Holiday row for the current day, for example "Saturday", the settings in that row are applicable all through the day, overriding any other "Saturday" rows. On Holidays, the definition can expand up to any number of days to account for exceptional situations that can last a few consecutive days. The number of days is the range from the start day to the end day. On DoW, the user selects from a list of predefined options such as, Mon, Tue, Wed, Thu, Fri, Sat, and Sun.

- A collection of named intervals in the range 00:00 to 23:59.
- A Default Interval Name for the Time of Day (ToD) without a specifically defined interval.

---

## Examples for defining Timetables

- Example 1

Timetable represents an Agent Group's Hours of Operation and Holidays. The Timetable can only provide "OPEN" and "CLOSE" as interval names,

- Example 2

Timetable oriented to Routing Strategy parameters, might require a different set of tags such as, "WEEKDAY\_BUSINESS\_HOURS", "WEEKDAY\_NIGHT" and "WEEKEND" labels.

- Example 3

Timetable for routing scripts, can define tags such as, "PEAK", "VALLEY", "RAMP-UP", and "RAMP-DOWN" according to meaningful traffic conditions.

- Example 4

Timetable with "IN-HOUSE" and "OVERFLOW" labels.

- Example 5

Timetable can be defined for in-house Locations, to factor in the labor cost. In such a case, the intervals can be named "HIGH", "MEDIUM", and "LOW".

Each Timetable is designed with a particular customer in mind. The lists of tags defined in a Timetable are expected to be handled by a particular customer. For example, for a particular customer the Routing Script knows upfront what kind of "resource" the Timetable refers to. In each row with a Date entry, a Default Interval Name is defined to minimize the effort of data entry.

For example, a DoW entry (Monday to Friday) for "CORE\_HOURS" can have a default of "NON-CORE\_HOURS".

---

## Different uses of Timetables

The Timetables are used in different ways depending on the context.

**Global Properties:** Global Properties are used to "extend" the configuration model objects, such as Agent Group or Location. When a Global Property has the Timetable Type, it's because the property needs to have different values on different ToD or DoW. So the important concept in this case is the Interval Names are used as "values" by the Strategy Scripts.

**Example 1:** a Timetable property for "Hours of Operation" can be defined for Locations. The interval names "OPEN" & "CLOSE" are used in conditional expressions for the script to determine at each point in time (request) if a particular Location is Opened or Closed.

**Example 2:** a Timetable property for "Outsourcer Cost" can be defined for Companies. The intervals can be named "0.12" "0.07" etc., because the script would consider the current interval as a "numeric value" (every time the Timetable is checked, it returns a different interval name,

which is “interpreted” as a dollar value by the script, when using that value to calculate transfer cost).

**Strategy Settings:** These objects can have an associated Timetable, when Interval names are used to enter different Values for Script Variables. The Strategy Settings object refers to a concrete Timetable object, when at least one Script Variable in the associated Strategy Script is time-dependent. If no time-dependent Variables are defined in the Script, then Timetable is of no use in the Strategy Settings level.

**Script Variables:**

They can be time-dependent, i.e. support different values per ToD/DoW. The Simple & “Per-Destination” Variable Types are independent of time, while “Per-Interval” and “Per-DestinationInterval” both depend on ToD/DoW. In practical terms this means any time-dependent Variable should be configured a different value for each possible Interval (or situation) defined in a Timetable. When a Script Variable is time-dependent, the set of Intervals are determined by the Timetable selected at the Strategy Settings level.

Example: “Outsourcer Overflow” flag can be a Per-Interval variable with Yes/No values. The variable is defined at Script level, and scripts should be reused across multiple call segments. In some call segments, the Strategy Settings objects may use Timetable1 with the following intervals “WORK”, “NON-WORK”, “WEEKEND”, and therefore 3 values are defined for “Outsourcer Overflow” flag (one for each situation).

On other call segments, the Strategy Settings may use Timetable2 with “PEAK”, “VALLEY”, “TRANSITION”, “STATE-HOLIDAY” and “NATIONAL-HOLIDAY”, thus 5 different values need to be defined for this.

---

## Creating a Timetable

### Procedure

1. In the left panel, in **Decision Management**, click **Timetables**.  
The system, displays a list of timetables.
2. Click **Add** (  ).
3. On the **Edit Table** page in the **Timetable Options** section, do the following:
  - a. Enter the name of the Timetable.
  - b. (Optional) Enter the description of the Timetable.
  - c. Click **Add** (  ) to enter the Interval Name  
You can add multiple intervals.
  - d. Enter the Interval Name in the new empty field that appears.
  - e. Click **Move Up** or **Move Down** to navigate up and down in the Interval list.
4. Click **Days of Week** and do the following:
  - a. Click **Add** (  ).
  - b. Enter the **Name**.
  - c. From the drop-down select the **Default Interval Name**.

- d. Click **Add** (  ) to add an interval.
  - e. In the **Intervals** section, provide the information in the **Interval Name**, **From**, and **To** fields.
  - f. In the **Repeat Every** section, select the day of the week that you want the process to repeat.
  - g. Click **Save**.  
The Interval Name section displays the new Interval that you added.
5. Click **Holidays** and do the following:
    - a. Click **Add** (  ).
    - b. In the Edit Holiday Entry screen, provide the **Holiday Name** and **Default Interval Name**.
    - c. Click  to select the date from which you want the interval to start.
    - d. Click to select the time from which you want the interval to start.
    - e. Click  to enter the end date for the interval.
    - f. Click to select the time at which you want the interval to end.
    - g. Click **Add** (  ).
    - h. In the **Intervals** section, provide the information in the **Interval Name**, **From**, and **To** fields.
  6. Click **Save**.

---

## Edit Timetable fields and button descriptions

Name	Description
<b>Timetable Options</b>	
<b>Name</b>	The name of the Timetable.
<b>Description</b>	The description of the Timetable.
<b>Interval Names</b>	The names of the Intervals.

Button	Description
<b>Add</b> (  )	Adds a new Interval in the timetable.

Button	Description
Delete (  )	Deletes an Interval from the timetable.
Move Up	Select an Interval and click <b>Move Up</b> to move the interval up in the list of intervals.
Move Down	Select an Interval and click <b>Move Down</b> to move the interval down in the list of intervals.

---

## Days of Week field descriptions

Field	Description
DoW entry Name	Enter the name for the Day of Week entry.
Default Interval Name	Click to select the default name for the DoW entry.
Repeat Every	Select the days of the week in DoW when you want the process to repeat.
<b>Intervals</b>	
Interval Name	Enter the name of the Interval.
From	Enter the start time for the Interval.
To	Enter the end time for the Interval.

---

## Holiday Entry field descriptions

Field	Description
Holiday Name	Enter the name for the Holiday entry.

Field	Description
<b>Select a Default Interval Name</b>	Select a default Interval for the Holiday entry.
<b>From</b>	Enter the date and the time of start for the Holiday entry.
<b>To</b>	Enter the date and time when the Holiday entry ends.
<b>Intervals</b>	
<b>Interval Name</b>	Enter the name of the Interval for the Holiday entry.
<b>From</b>	Enter the start time for the Interval of the Holiday entry.
<b>To</b>	Enter the end time for the Interval of the Holiday entry.

---

## Deleting a Timetable

### Procedure

1. In the left panel, in **Decision Management**, click **Timetables**.  
The system displays the list of timetables.
2. Click the row of the Timetable that you want to delete.
3. Click **Delete** ().  
The system displays a confirmation message.
4. Click **Accept**.  
The Dynamic Routing application displays a confirmation message.

If the Timetable is being referenced by any Global Property, the Dynamic Routing application displays a message to remove the references.

---

## Modifying a Timetable

### Procedure

1. In the left panel, in **Decision Management**, click **Timetables**.  
The system displays the list of timetables.
2. Double-click the row of the Timetable that you want to modify.
3. On the Edit Timetable page, modify the fields for the **Timetable Options**, **Days of Week**, and **Holidays**.
4. Click **Days of Week** and do the following:

- a. Click **Add** (  ).
  - b. Enter the **Name**.
  - c. From the drop-down, select the **Default Interval Name**.
  - d. Click **Add** (  ) to add an interval.
  - e. In the Intervals section, provide the information in the **Interval Name**, **From**, and **To** fields.
  - f. In the Repeat Every section, click the day of the week that you want the process to repeat.
  - g. Click **Save**.  
The Interval Name section displays the new Interval that you added.
5. Click **Holidays** and do the following:
    - a. Click **Add** (  ).
    - b. On the Edit Holiday Entry screen, provide the details in **Holiday Name** and **Default Interval Name** fields.
    - c. Click  to select the date from which you want the interval to start.
    - d. Click to select the time from which you want the interval to start.
    - e. Click  to enter the end date for the Interval.
    - f. Click to select the time at which you want the interval to end.
    - g. Click **Add** (  ).
    - h. In the Intervals section, provide the information in **Interval Name**, **From**, and **To** fields.
  6. Click **Save** to save the modified Timetable

---

## Decision Tracer

You can use the Decision Tracer tool to exercise Segmentation and Strategy configurations. You may want to see which logical steps were performed, which Destinations got discarded in the selection process, and why. You may also want a confirmation on which specific configuration elements were exercised and what was the output. For example, you may want to see the output for Segmentation Rule and the Strategy Script.

Decision Tracer can be used to run the test requests for the respective segmentation and get the result on the Routing Admin page. Decision Tracer is split in two vertical panels, Request and Response panel.

## Sending a Request

### Procedure

1. In the left panel, in **Decision Management**, click **Decision Tracer**.
2. In the **Decision Function** field, enter a function.
3. In the **Segmentation Table** field, select the table from the drop box.

4. In the **Interaction ID** field, enter an ID.  
If no ID is entered, the system auto generates an ID in yyymmddhhmmss format.
5. In the **Segmentation Attributes** field, enter the required values.
6. (Optional) If you want to add more rows, click **Add Segmentation Attributes**.
7. In the **Custom Parameters**, enter the required information.
8. (Optional) If you want to add more rows, click **Add Custom Parameter**.
9. Click **Send test request**.

The system displays the required response in the Make a Request window.

---

## Lookup Tables

Lookup Tables serve as a mechanism to search a value based on a key in a routing request. An attribute or a key is used to search either single value or multiple values. A Lookup Table stores single value in a unidirectional table and stores multiple values in a multidimensional table. These dimensions must be configured when you are adding a Lookup Table in the system.

### Adding a Lookup Table

#### Procedure

1. In the left panel, in **Decision Management**, click **Lookup Tables**.
2. On the Lookup Table page, click **Add** (.
3. In the **Name** field, type the name of the lookup table.
4. In the **Lookup Key** field, type the name of the Lookup key which you want to map with the dimension name.
5. In the **Description** field, type the description for the new lookup table.
6. To create a table for single key/value pair, click **Unidimensional** and provide the following details:
  - a. **Dimension type**: Select the type as **Number** or **Text**.
  - b. **Dimension name**: Type the name of the Dimension name which you want to map with the Lookup key.
  - c. **Default value**: Type the value based on the **Dimension type** defined.

 **Note:**

Make sure the **Lookup Key** name does not matches the **Dimension Name**.

7. To create a table for single key/multiple value pair, click **Unidimensional**
8. Click **Add** () and provide the following details:
  - a. **Name**: Type the name of the key.
  - b. **Type**: Select the type of value as **Text** or **Number**.
  - c. **Default value**: Type the value for the defined key based on the defined **Type**.
  - d. Click **Add** () to define multiple values.
  - e. Click **Delete** () to delete a value from the list.

**\* Note:**

Changing the **Dimension type** of an existing Lookup table from **Text** to **Number** requires user confirmation.

9. Click **Save**.

---

## Lookup Tables field and button descriptions

Name	Description
<b>Name</b>	A field to define the name of a Lookup Table.
<b>Lookup Key</b>	Name of the Lookup key which you would like to map with the dimension name.
<b>Description</b>	A field to define the description of the new Lookup Table.
<b>Table options</b>	
<b>Unidimensional</b>	<p>A field to define the single key/value pair entry for a lookup table. The values are:</p> <ul style="list-style-type: none"><li>• <b>Dimension Type:</b> A field to define the information type. The options are:<ul style="list-style-type: none"><li>○ <b>Number</b></li><li>○ <b>Text</b></li></ul></li><li>• <b>Dimension name:</b> The Dimension name which you would like to map with the Lookup key.</li><li>• <b>Default Value:</b> A field to define the value of the key based on the defined dimension type.</li></ul> <p><b>* Note:</b></p> <p>Make sure the <b>Lookup Key</b> name does not matches the <b>Dimension Name</b>.</p>
<b>Multidimensional</b>	<p>A field to define the multiple key/value pair entry for a lookup table. The values are:</p> <ul style="list-style-type: none"><li>• <b>Name:</b> A field to define the name of the key.</li><li>• <b>Type:</b> A field to define the dimension type. The options are:<ul style="list-style-type: none"><li>○ <b>Number</b></li><li>○ <b>Text</b></li></ul></li><li>• <b>Default value:</b> A field to define the value of the</li></ul>

	key based on the defined dimension type.

Button	Description
Add (  )	Adds a new multidimensional key/value pair.
Delete (  )	Deletes an existing multidimensional key/value pair.
Back to List	Takes you to the main page of the Lookup Table
View Settings	Displays the Lookup Table in edit mode.
View Content	Displays the list of existing values of a Lookup table in inline edit mode.

**For example:** A segmentation table where a DNIS attribute is mapped to the multiple caller dimensions is shown in the following table:

DNIS	Caller Attributes
80001234444	Package=FAMILY;Tenure=12;State=TX;Bundle=NO
80001234566	Package=FAMILY;Tenure=12;State=TX;Bundle=NO
80001237899	Package=FAMILY;Tenure=12;State=TX;Bundle=NO

This can be defined in the lookup table as shown in the following screenshot:

Back to List View Content

Name

Description

Unidimensional
  Multidimensional

(Changes will take effect only when the 'Save' button is hit)

Name	Type	Default value
<input type="text" value="Package"/>	Text <input type="button" value="v"/>	<input type="text" value="FAMILY"/>
<input type="text" value="Tenure"/>	Number <input type="button" value="v"/>	<input type="text" value="12"/>
<input type="text" value="State"/>	Text <input type="button" value="v"/>	<input type="text" value="TX"/>
<input type="text" value="Bundle"/>	Text <input type="button" value="v"/>	<input type="text" value="NO"/>

Save Close

**Figure 10: Lookup table - Multidimensional**

# Chapter 7: Administering Destinations

---

## Overview

Dynamic Routing administers Destinations such as Agent Groups, Services, Automatic Call Distribution (ACD) Systems, Companies, Locations, and Applications. With Dynamic Routing, users can view metrics and traffic for Agent Groups type of Destinations.

---

## Administering Agent Groups

Agent Groups are a type of destination that Dynamic Routing administers. Agent Groups are a group of agents to which a call is routed in a Contact Center. The Routing Service decides to route a call to an Agent Group based on the following attributes:

- Run-time metrics
  - Routing logic
  - Custom or extra attributes that are useful to determine which of the professional staff available should respond to the customer call
- 

## Creating Agent Groups

### Procedure

1. In the left panel, in **Destinations**, click **Agent Groups**.  
The system displays the Agent Group table.
2. To add an Agent Group, click **Add** ().
3. On the Edit Agent Group window, enter the required details in the fields.  
For more information on the Edit Agent Group fields, refer to the [Agent Group field descriptions](#) table.
4. Click **Add** (.
5. Enter the name and address of the agent group that you are creating.
6. (Optional) In the Global Properties section, select the appropriate values for the properties.  
The Default Value check-box is selected by default.
7. Click **Save**.  
The new Agent Group is added.

## Agent Groups field descriptions

Field Name	Field Description
<b>Agent Group Name</b>	This is the name of the Agent Group.
<b>ACD</b>	Select the Automatic Call Distribution (ACD) System for the Agent Group.
<b>Native ID</b>	This is the Native ID for the Agent Group, meaningful outside of DR for example Skill Id
<b>Company</b>	Select the Company.
<b>Channel</b>	Select the type of channel from the following list: <ul style="list-style-type: none"> <li>• Voice (default)</li> <li>• Chat</li> <li>• Email.</li> </ul>
<b>Location</b>	Enter the Location.
<b>Addresses</b>	Enter the addresses for the Agent Group.
<b>Name</b>	Enter the name for the address of the Agent Group. <p> <b>Note</b></p> <p>As one address entry is mandatory, you must save the first entry with the default or a new name.</p>
<b>Address</b>	Enter the address for the Agent Group. Address is any string allowing the Interaction Manager to transfer the contact. It typically is a Queuing VDN in Avaya CM world, or a SIP address
<b>Global Properties</b>	Modify the Global Properties for the Agent Group that is overwriting the default values. Following is the global properties of Agent groups: <ul style="list-style-type: none"> <li>• OpenHours</li> <li>• manualDisable</li> </ul> <p>For more information on Agent group global properties, see <a href="#">Agent Group global properties field descriptions</a>.</p>

---

# Administering Services

## Procedure

1. In the left panel, in **Destinations**, click **Services**.  
The system displays the Services table.
2. To add a service, click Add (  ).
3. On the Edit Service window, enter the required details in the fields.  
For more information on the Edit Service fields, refer to the [Services field descriptions](#) table.
4. Click **Add** (  ).
5. Enter the name and address of the Service that you are creating.
6. (Optional) In the Global Properties section, select the appropriate values for the properties.  
  
The Default Value check-box is selected by default.
7. Click **Save**.  
The new Service is added.

---

## Services field descriptions

Name	Description
<b>Name</b>	This is the name of the Service.
<b>Channel</b>	Enter the type of channel e.g. Voice, Chat, Email.
<b>Addresses</b>	Enter the addresses for the Service
<b>Name</b>	Enter the name for the address of the Service.
<b>Address</b>	Enter the address for the Service. Address is any string allowing the Interaction Manager to transfer the contact. It typically is a Queuing VDN in Avaya Communication Manager, or a SIP address.
<b>Global Properties</b>	Modify the Global Properties for the Service that is, overwrites the default values. The global property of Services is Score.  For more information on Agent group global properties, see <a href="#">Services global properties field descriptions</a> .
<b>Available Agent Group</b>	Displays the list of Agent Groups that are grouped by this Service. An Agent Group can belong to multiple Services. Following is the

	list of agent groups: <ul style="list-style-type: none"> <li>• Available Agent Groups</li> <li>• Selected Agent Groups</li> </ul>
--	---

---

## Administering ACDs

### About this task

Dynamic Routing helps the users to manage Automatic Call Distribution (ACD) Systems. With the Dynamic Routing feature the users can:

- Add an ACD to the system.
- Delete an ACD from the system, if not used.
- Modify properties of an ACD.
- List ACD records based on a filtered search. This view also displays real time information that is, whether the information is latest or earlier for the metrics status and traffic data of each ACD.

Do the following to add an ACD.

### Procedure

1. In the left panel, in **Destinations**, click **ACDs**.

The system displays the ACDs table.

2. Click **Add** ().
3. In the Edit ACD window, enter the required details in the fields.

For more information on the ACD fields, see [ACDs field descriptions](#)

4. Click **Save**.

The ACD page displays the new ACD is in the list of existing ACDs.

---

## ACDs field descriptions

Name	Description
<b>Native ID</b>	Enter the Native ID of the ACD, meaningful outside of DR.
<b>Name</b>	Enter the name of the ACD.
<b>Description</b>	Enter the description of the ACD.
<b>Vendor</b>	Enter the name of the vendor for example, Avaya or other brand.
<b>Model</b>	Enter the model for example, CM Elite.
<b>Release</b>	Enter the Release number for example, 6.2.
<b>Outsourcer</b>	Select if this is outsourced ACD (outside the

	company).
<b>Metrics Available</b>	Select if there are metric available.
<b>PSTN Connectivity</b>	Indicates whether the Interaction Manager needs to transfer the call through PSTN or SIP.
<b>Global Properties</b>	<p>Modify the Global Properties for the ACD that is, overwrite the default values. Following are the global properties of ACDs:</p> <ul style="list-style-type: none"> <li>• Least_Cost_Routing</li> <li>• metricsExpirationThreshold</li> </ul> <p>For more information on ACDs global properties, see <a href="#">ACDs global properties field descriptions</a></p>

---

## Modifying the details of an ACD

### Procedure

1. In the left panel, under **Destinations**, click **ACDs**.  
The system displays the ACDs table.
2. Double-click the ACD row you want to modify.
3. On the Edit ACD window, modify the details of the required fields.  
For more information on ACD fields, see [ACDs field descriptions](#) table.
4. Click **Save**.  
The ACD page reflects modified ACD details.

---

## Administering Companies

### About this task

Dynamic Routing allows the user to administer the Company properties such as the name and description. Do the following to add a company.

### Procedure

1. In the left panel, in **Destinations**, click **Company**.  
The system displays the Companies table.
2. Click **Add** ().
3. On the Company popup window, enter the details for the new company.
4. Click **Save**.  
Dynamic Routing displays the message that the new company is added.

---

## Company field descriptions

Name	Description
------	-------------

Name	Description
<b>Name</b>	Enter the name of the new Company.
<b>Description</b>	Enter the description of the new Company.
<b>Global property</b>	<p>Displays the name of the Global Property for the Company. Following are the global properties of Company:</p> <ul style="list-style-type: none"> <li>• Least_Cost_Routing</li> <li>• Manual_Emergency_Flag</li> </ul> <p>For more information on Company global properties, see <a href="#">Company global properties field descriptions</a></p>
<b>Value</b>	Enter the value of the Global Property.

## Modifying the details of Company

### Procedure

1. In the left panel, under **Destinations**, click **Company**.  
The system displays the Companies table.
2. Double-click the row of the Company, the details of which you want to modify.
3. On the Edit Companies pop-up window, modify the details of the required fields.  
For more information on Companies fields, see [Company field descriptions](#)
4. Click **Save**.

The Company page reflects the modified Company details.

---

## Deleting Companies

### Procedure

1. In the left panel, in **Destinations**, click **Company**.  
The system displays the Companies table.
2. Click the row of the Company that you want to delete.
3. Click **Delete** ().

The system displays a confirmation message.

4. Do one of the following:
  - Click **Cancel** to cancel the selection.
  - Click **Accept** to delete the Company.

Dynamic Routing displays a confirmation message.

---

## Administering Locations

### About this task

Dynamic Routing helps the user to add, delete, or modify Locations. Do the following to add a location.

### Procedure

1. In the left panel, under **Destinations**, click **Location**.

The system displays the Destinations table.

2. Click **Add** ().

3. Enter the required details on the Edit Locations pop-up window.

For information on the Edit Locations fields, see [Locations field descriptions](#)

4. Click **Save**.

The Locations page displays the Location that you added.

---

## Locations field descriptions

Field Name	Field Description
<b>Name</b>	Enter the name of the Location.
<b>Description</b>	Enter the description of the Location.
<b>Global Property</b>	Modify the Global Properties for the Location. The global property of Location is Manual_Emergency_Flag.  For more information on Location global properties, see <a href="#">Location global properties field descriptions</a> .
<b>Value</b>	Enter the value of the Global Property.

---

# Administering Applications

## About this task

Application represents a destination that can be used to handle a call, instead of agents. Do the following to modify the details of Applications.

## Procedure

1. In the left panel, in **Destinations**, click **Applications**.  
The system displays the Applications table.
2. Double-click the row of the Application, the details of which you want to modify.
3. On the Edit Applications window, modify the details of the required fields.  
For more information on the Edit Applications fields, refer to the [Applications field descriptions](#) table.
4. Click **Save**.  
The Applications page reflects the modified Application details.

---

## Applications field descriptions

Name	Description
<b>Name</b>	Enter the name of the Application.
<b>Channel</b>	Enter the type of channel e.g. Voice, Chat, Email.
<b>Addresses</b>	Enter the addresses for the Application.
<b>Name</b>	Enter the name for the address of the Application.
<b>Address</b>	Enter the address for the Application. Address is any string allowing the Interaction Manager to transfer the contact. It typically is a Queuing VDN in Avaya Communication Manager, or a SIP address.

---

## Adding or deleting an Application

### Procedure

1. In the left panel, in **Destinations**, click **Applications**.  
The system displays the Destination table.
2. Click **Add** ().
3. Enter the required details on the Edit Applications pop-up window.  
For information on the Applications fields, see [Applications field descriptions](#)
4. In the **Application** field enter the name of the application.
5. From the **Channel** drop-box, click the Channel type.

6. Click **Add Address**.
7. Enter the **Name** and the **Address**.
8. Click **Save**.

The Applications page displays the Application that you added.

If no calls have been routed to the Application in the last fifteen minutes or the entire day, the system displays a message: No activity detected on this Destination today.

# Chapter 8: Administering System Properties

---

## System Properties Overview

System Properties avoid the overhead of maintaining multiple property files throughout the application by storing properties in Config Store instead. The properties are pre-populated at install in Config Store and can be modified through Routing Admin.

There are some properties required by Config Store when at start up, and these properties by only exception are stored in a file: pu.xml.  
(dr\_configurationstore\_space\_pu/src/main/resource/META\_INF/spring/pu.xml).

You can administer the following System Properties using the Dynamic Routing application:

- System
- Platform
- Routing Service
- Routing Admin
- Metrics Service
- Config Store

You can view the details of these properties and also edit the values of these properties. Once you change the value of a property, you might need to restart the system for the new value to take effect.

 **Note**

If you want to change the maximum limit for the System Properties without upgrading to the latest version of the application, you must send the request to the Dynamic Routing design team. The design team modifies and also encodes the new property file before sending the file to you. The design team also provides instructions to replace the new properties file on your system. You must restart your system after replacing the Dynamic Routing property file.

---

## Administering the Platform properties

### Procedure

1. In the left pane, in **System Settings** click **System Properties**.  
The system displays the System Properties table.
2. Click **Platform**.  
The system displays the Platform Properties table
3. In the **Value** field, type the value for the property.  
For this release there are no platform properties.

---

## Platform properties field descriptions

Name	Description
min.alarm.interval	This parameter defines the time interval (in seconds) for alarms that are sent to Avaya Aura® Session Manager. If more instances of the same alarm are generated during the interval, DR 3 throttles them.

## Administering the Routing Service properties

### Procedure

1. In the left pane, in **System Settings**, click **System Properties**.
2. Click **Routing Service**.  
The system displays the Routing Service Properties table.
3. In the **Value** field, type the value for the property.  
For more details refer to the [Routing Service properties field descriptions](#) table.

---

## Routing Service properties field descriptions

Name	Description
contextStore.port	This parameter defines the valid port to access the Context Store. For the new value to take effect, user must restart the system. Valid value: Valid port address defined in the Context Store. Default value: 8080
contextStore.strategy	This parameter defines the Strategy for accessing the Context Store. For the new value to take effect, user must restart the system. Default value: RoundRobin
contextStore.password	This parameter defines the password to access the Context Store. For the new value to take effect, user must restart the system. Valid value: Password provided by the Context Store administrator.
contextStore.user	This parameter defines the user name to access the Context Store. For the new value to take effect, user must restart the system.

Name	Description
	Valid value: User name provided by the Context Store administrator.
contextStore.access	This parameter defines if the client such as Dynamic Routing or Interactive Voice Response IVR has access to the Context Store or not. For the new value to take effect, the user need not restart the system. Valid values: Yes or No Default value: Yes
contextStore.path	This parameter defines the specific path of the application where Context Store is running. For the new value to take effect, user must restart the system.  Valid value: Valid path address For example: /ingensg-cs-interface/cmfcache
contextStore.host	This parameter defines the host address to access the Context Store. For the new value to take effect, user must restart the system. Valid value is the valid IP address of the Context Store host machine. For example: 10.130.89.39
contextStore.lease	This parameter defines the time in seconds after which Context Store data will expire from the Context Store cache. For the new value to take effect, user must restart the system. Valid values: time in seconds. Default value: 10 seconds
contextStore.enforceDestSelectionAfterDF	This parameter determines whether a destination selection must be included as a decision object. Valid value: Yes or No. When YES indicates that an Agent Group is not available for StaticRouting script.

---

## Administering the Routing Admin properties

### Procedure

1. In the left pane, in **System Settings**, click **System Properties**.  
The system display the System Properties table

2. Click **Routing Admin**.  
The system displays the Routing Admin Properties table.
3. In the Value field, type the value for the property.  
For more details refer to the [Routing Admin properties field descriptions](#) table.

---

## Routing Admin properties field descriptions

Name	Description
traffic.refreshRate	<p>This parameter gives the time in milliseconds for the traffic counter to refresh</p> <p>For the new value to take effect, the user need not restart the system.</p> <p>Valid value: time in milliseconds</p> <p>Default value: 10000 milliseconds</p>
company.name.display	<p>Display Name for company labels in Routing Admin (RA).</p> <p>For the new value to take effect, the user must log into the Routing Admin application again.</p> <p>Valid values: valid string</p> <p>Default value: Company</p>
location.name.display	<p>Display Name for location labels in Routing Admin (RA).</p> <p>For the new value to reflect, the user must log into the Routing Admin application again.</p> <p>Valid values: valid string</p> <p>Default value: Location</p>
segmentation.rules.inlineediting	<p>This parameter defines whether to allow users to edit a Segmentation Rule in-line or double-click to edit the rule in a pop-up window. This helps in editing of large number of segmentation rules with many Dimensions.</p> <p>For the new value to take effect, the user need not restart the system.</p> <p>Valid values: Yes or No</p>
metrics.refreshRate	<p>This parameter defines the time that the metrics chart takes to refresh.</p> <p>For the new value to reflect, the user need not restart the system.</p>

	<p>Valid value: Valid time in milliseconds.</p> <p>Default value: 10,000 milliseconds</p>
summarizer.preferred-metrics	<p>This parameter defines the set of 1 to 5 most important metrics to be aggregated in display.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• EWTMEDIUM</li> <li>• STAFFED</li> <li>• AVAILABLE</li> <li>• CALLSOFFERED</li> <li>• PERCENTINSL</li> </ul>

---

## Administering the Metrics Service properties

### Procedure

1. In the left pane, in **System Settings**, click **System Properties**.  
The system display the System Properties table
2. Click **Metrics Service**.  
The system displays the Metrics Service Properties table.
3. In the **Value** field, type the value for the property.  
For more details refer to the [Metrics Service properties field descriptions](#) table.

---

### Metrics Service properties field descriptions

Name	Description
metricsService.connectors.agentGroupAutoCreation	<p>Determines whether Agent Groups are auto-created based on the metrics feed from the ACD system.</p> <p>For the new value to reflect, the user need not restart the system.</p> <p>Valid values: Yes* or No</p> <p>Default value: No</p>

acdMetricStatus.staleThreshold	<p>Defines a Metrics Stale threshold in seconds.</p> <p>For the new value to reflect, the user need not restart the system.</p> <p>Valid value: Time in seconds.</p>
metricsService.metrics.destinationLeaseTime	<p>Specifies the maximum time in seconds that a DestinationMetrics object will be kept in the space without receiving any updates from connector or RT socket.</p> <p>For the new value to reflect, the user must restart the system.</p> <p>Valid values: time in seconds</p>
acdMetricStatus.warningMark	<p>Specifies the percentage that is the limit at which an ACD is considered to be in warning stage.</p> <p>For the new value to reflect, the user need not restart the system.</p> <p>Valid value : number from 1 to 100 Default value: 80</p>
metricsService.metrics.destinationTimeSeriesEntryLeaseTime	<p>Specifies the maximum time in seconds that a DestinationMetricsTimeSeriesEntry object is kept in Space without receiving any updates.</p> <p>For the new value to reflect, the user must restart the system.</p> <p>Valid value: time in seconds</p> <p><b>* Note</b></p> <p>If the metrics display looks cluttered with too many data points, for example, 3600 sec for one hour of data, adjust the data points to lesser value, for example, 300 sec. This will help in a clearer chart with fewer data points.</p>
acdMetricStatus.criticalMark	<p>Specifies the percentage at which an ACD is considered to be critical stage.</p> <p>For the new value to reflect, the user need not restart the system.</p>

	Valid value : number from 1 to 100 Default value: 80
--	---

**Note**

- If the connectors are allowed to create Agent Group entities in Dynamic Routing automatically, the value for the parameter `metricsService.connectors.agentGroupAutoCreation` should be Yes, otherwise the value is No. By default, the value of `metricsService.connectors.agentGroupAutoCreation` is No.
- If the value of the parameter `metricsService.connectors.agentGroupAutoCreation` is Yes, then the connector must provide Agent Group name information, which is the `agentGroupName` flag in the CMS connector XML configuration. The Agent Group Name sent by the connectors must not violate the naming constraints applied by Dynamic Routing. If, an Agent Group has a name identical to another Agent Group, then the duplicate name is not created.

---

## Administering the Config Store properties

### Procedure

1. In the left pane, in **System Settings**, click **System Properties**.  
The system display the System Properties table
2. Click **Config Store**.  
The system displays the Config Store Properties table.
3. In the **Value** field, type the value for the parameter.  
For more details refer to the [Config Store properties field descriptions](#) table.

---

### Config Store properties field descriptions

Name	Description
<code>configstore.debug.flag</code>	Enables the debug mode for config store services. If the value of the debug flag is Yes, the user can edit the default data configuration.  Valid values: Yes or No Default value: No
<code>configstore.read.timeout</code>	Maximum waiting time for the read

Name	Description
	<p>operations performed in Space.</p> <p>For the new value to take effect, the user must restart the system.</p>
configstore.write.timeout	<p>Maximum waiting time for the write operations performed in Space. If a write operation takes more time than what is defined, an exception is raised.</p> <p>For the new value to take effect, the user must restart the system.</p>
limit.count.acd	<p>Specifies the maximum number of ACDs that can be stored in Config Store using Routing Admin.</p> <p>Valid value: Valid number for an entity</p> <p>For example, Agent Group: 30,000</p> <p>ACD: 1-100</p>
limit.count.company	<p>Specifies the maximum number of Companies that can be stored in Config Store using Routing Admin.</p>
limit.count.location	<p>Specifies the maximum number of Locations that can be stored in Config Store using Routing Admin.</p>
limit.count.application	<p>Specifies the maximum number of Applications that can be stored in Config Store using Routing Admin.</p>
limit.count.role	<p>Specifies the maximum number of Roles that can be stored in Config Store using Routing Admin.</p>
limit.count.service	<p>Specifies the maximum number of Services that can be stored in Config Store using Routing Admin.</p>
limit.count.agentgroup	<p>Specifies the maximum number of AgentGroups that can be stored in Config Store using Routing Admin.</p>

Name	Description
limit.count.strategyscript	Specifies the maximum number of StrategyScripts that can be stored in Config Store using Routing Admin.
limit.count.decisionfunction	Specifies the maximum number of Decision Functions that can be stored in Config Store using Routing Admin.
limit.count.timetable	Specifies the maximum number of Timetables that can be stored in Config Store using Routing Admin.
limit.count.segmentationtable.dimension.lookup	Specifies the maximum number of Lookup Table Dimensions that can be saved for each Segmentation Table in Config Store using Routing Admin.
limit.count.strategysettings	Specifies the maximum number of StrategySettings that can be stored in Config Store using Routing Admin.
limit.count.strategyscript.strategyvariable	Specifies the maximum number of strategy variable that can be stored for each Strategy in Config Store using Routing Admin.
limit.count.strategyscript.destinationalias	Specifies the maximum number of destination alias that can be stored for each Strategy in Config Store using Routing Admin.
limit.count.globalproperty.acd	Specifies the maximum number of custom properties that can be stored for each ACD in Config Store using Routing Admin.
limit.count.globalproperty.agent_group	Specifies the maximum number of custom properties that can be stored for each Agent Group in Config Store using Routing Admin.
limit.count.globalproperty.company	Specifies the maximum number of custom properties that can be stored for each Company in Config Store using Routing Admin.

Name	Description
limit.count.globalproperty.location	Specifies the maximum number of custom properties that can be stored for each Location in Config Store using Routing Admin.
limit.count.globalproperty.service	Specifies the maximum number of custom properties that can be stored for each Service in Config Store using Routing Admin.
limit.count.addresses.service	Specifies the maximum number of Addresses that can be stored for each Service in Config Store using Routing Admin.
limit.count.addresses.agentgroup	Specifies the maximum number of Addresses that can be stored for each AgentGroup in Config Store using Routing Admin.
limit.count.addresses.application	Specifies the maximum number of Addresses that can be stored for each Application in Config Store using Routing Admin.
limit.count.segmentationtable	Specifies the maximum number of Segmentation Tables that can be stored in Config Store using Routing Admin.
limit.count.segmentationtable.dimension	Specifies the maximum number of dimensions that can be stored for each SegmentationTable in Config Store using Routing Admin.
limit.count.segmentationtable.segmentationrule	Specifies the maximum number of segmentation rules that can be stored for each SegmentationTable in Config Store using Routing Admin.
limit.count.segmentationtable.dimValues	Specifies the maximum number of cells to have in the segmentation that will limit the dimensions rule.
limit.count.lut.dimensions	Specifies the maximum number of Dimensions a Lookup Table is allowed to have. Maximum allowed value is 10.

Name	Description
limit.count.lut.entries	Specifies the maximum number of entries (rows) a Lookup Table is allowed to have. Maximum allowed value is 500.

**\* Note**

All the limit count parameters give the maximum number of an entity such as ACD, Application, and Location that can be stored in Config Store using Routing Admin. The performance of Dynamic Routing depends on the maximum number of entities configured in the space. With these System Properties, we can guarantee a benchmarked performance for the solution, and a known response time. If the values of these System Properties are changed, the benchmarks are invalidated. These System Properties should not be modified.

# Chapter 9: Administering Global Properties

---

## Overview

Through the Dynamic Routing application you can administer Global Properties associated with Automatic Call Distribution (ACD) Systems, Agent Groups, Applications, Locations, Companies, and Services. Global Properties extend entities such as ACDs, Agent Groups, Locations, Companies, and Services, by adding additional properties to these entities, and allowing these properties to have unique values for each instance of the entity. When adding a new global property like in the case for Agent Group entities, all the Agent Groups created in the system inherit initially the default value. Later, different Agent Groups can be customized to hold a different value for the same Global Property.

Furthermore, Global Properties can be accessed and used in Strategy and Decision Function scripts. You can add, delete, and modify Global Properties.

---

## Administering the ACD Global Properties

### Procedure

1. In the left pane, under **System Settings**, click **Global Properties**.

The system displays the ACD Global Properties table.

2. Click **Add** ().

3. Enter the required details in the fields.

For more information, refer to the [ACDs Global Properties field descriptions](#) table.

4. Click **Save**.

The Global Property is added.

5. (Optional) To delete a Global Property, click **Delete** ().

The Global Properties are customer specific. The Global Properties differ from customer to customer.

---

## ACDs Global Properties field descriptions

Name	Description
metricsExpirationThreshold	<p>The property describes the threshold values to filter metrics that should be ignored during destination selection.</p> <p>This is a number type variable, with a default value of 20 seconds. The minimum value is 0.00 seconds and the maximum value is 60000.0 seconds</p>

---

## Administering the Agent Group Global Properties

### Procedure

1. In the left pane under **System Settings**, click **Global Properties**.  
The system displays the ACD Global Properties table.
2. Click the **Agent Group** tab.  
The system displays the Agent Group screen.
3. Click **Add** ().
4. Enter the required details in the fields.  
For more information, refer to the [Agent Group Global Properties field descriptions](#) table.
5. Click **Save**.  
The Global Property is added.
6. (Optional) To delete a Global Property, click **Delete** ().  
The Global Properties are customers specific. The Global Properties differ from customer to customer.

---

## Agent Group Global Properties field descriptions

Name	Description
OpenHours	Timetable provides Interval names which can be used to consider or discard the corresponding Destinations in a Strategy.
manualDisable	Indicates if an Agent Group is available

Name	Description
	Valid values: YES or NO When YES indicates that an Agent Group is not available for StaticRouting script.

## Administering the Location Global Properties

### Procedure

1. In the left pane under **System Settings**, click **Global Properties**.  
The system displays the ACD Global Properties table.
2. Click the **Location** tab.  
The system displays the Location screen.
3. Click **Add** ().
4. Enter the required details in the fields.  
For more information refer to [Location Global Properties field descriptions](#) table.
5. Click **OK**.  
The Global Property is added.
6. (Optional) To delete a Global Property, click **Delete** ().  
The Global Properties are customer specific. The Global Properties differ from customer to customer.

## Location Global Properties field descriptions

Name	Description
Manual_Emergency_Flag	Enables or disables a location as a possible destination.

## Administering the Company Global Properties

### Procedure

1. In the left pane, under **System Settings**, click **Global Properties**.  
The system displays the ACD Global Properties table.
2. Click the **Company** tab.  
The system displays the Company screen.
3. Click **Add** ().

4. Enter the required details in the fields.  
For more information refer to the [Company Global Properties field descriptions](#) table.
  5. Click **Save**.  
The Global Property is added.
  6. (Optional) To delete a Global Property, click **Delete** ().
- The Global Properties is customers specific. The Global Properties differ from customer to customer. An example of a possible Company Global Property

---

## Company Global Properties field descriptions

Name	Description
<b>Manual_Emergency_Flag</b>	Enables or disables a location as a possible destination. Valid values: YES or NO When YES indicates that an Agent Group is not available for StaticRouting script.

## Administering the Service Global Properties

### Procedure

1. In the left pane, under **System Settings**, click **Global Properties**.  
The system displays the ACD Global Properties table.
2. Click the **Service** tab.  
The system displays the Service screen.
3. Click **Add** (.
4. Enter the required details in the fields.  
For more information refer to the [Services Global Properties field descriptions](#) table.
5. Click **Save**.  
The Global Property is added.
6. (Optional) To delete a Global Property, click **Delete** (.

The Global Properties is customers specific. The Global Properties differ from customer to customer. An example of a possible Service Global Property

---

## Services Global Properties field descriptions

Name	Description
<b>Score</b>	Flag to set the Service Score. Valid values : Numbers between 1 to 10 Default value: 1

# Chapter 10: Real-time monitoring

## Overview

Agent groups have both metrics and traffic data associated with them. They are displayed in separate types of charts and these two charts can be displayed or hidden just below the Agent Group list panel, once the corresponding check boxes are selected or unselected.

Similarly, Segmentation Rules and Applications can display traffic data only.

Figure 10 displays an example of the metrics for agent group.

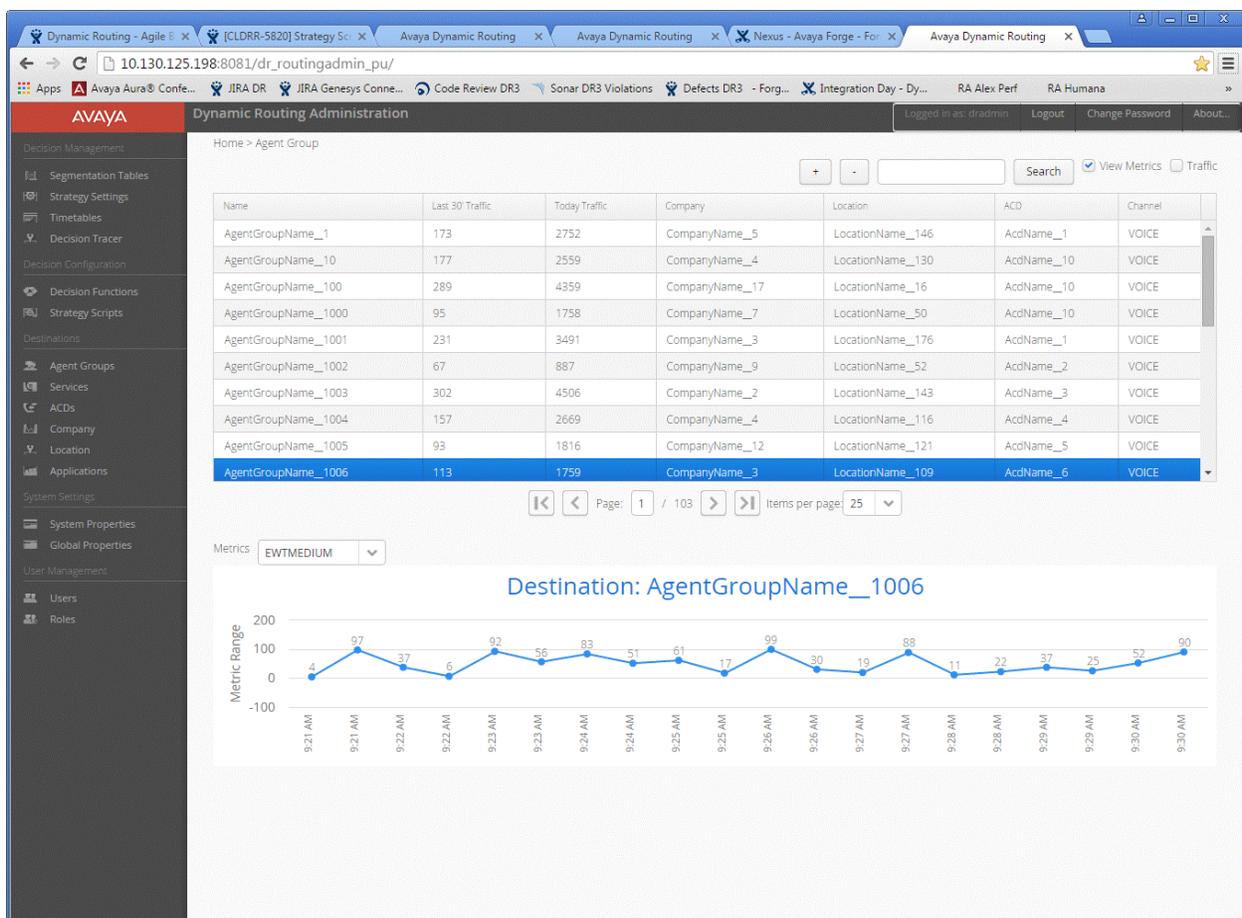


Figure 11: Graph depicting traffic for an agent group rule

---

# Viewing metrics

---

## Viewing metrics for a Destination

### About this task

Do the following to view metrics for a Destination such as Agent Groups, Services, Automatic Call Distribution (ACD) System, and more.

### Procedure

1. Click the row for the Destination for which you want to view metrics.
2. Click the **View Metrics** check box.
3. Click **Metrics** to select a Metrics type.  
The page displays a graph for the metrics you selected for the destination.

---

## Viewing the traffic for a Destination

### About this task

Do the following to view traffic for a Destination such as Agent Groups, Services, Automatic Call Distribution (ACD) Systems, and more.

### Procedure

1. Click the row for the Destination for which you want to view traffic.
2. Click the **Traffic** check box.  
The page displays a graph for the traffic details for the destination in the last fifteen minutes.
3. (Optional) Click **Today's Summary**.  
The page displays a graph for the traffic details for the destination in the entire day.

If no calls have been routed to the Destination in the last fifteen minutes or the entire day, the system displays a message: No activity detected on this Destination today.

# Chapter 12: Administering Users and Roles

---

## Changing the password

### About this task

An administrator who has the Update User permission can change the password for other users.

Also, after the DR upgrade, if a password does not match the password complexity criteria, then it is forced to change by the system.

### Procedure

1. To change the password of a particular user, do the following:
  - In the left panel, in **User Management**, click **Users**.
  - Double-click the row that you want to change the password.
2. To change your password, on the top right, click **Change Password**.

The system displays the Edit User window.

3. In the **Logged in User Password** field, enter your current password.
4. In the **New password** field, enter the new password that you want to set.

#### \* Note

In all cases, when you change the existing password, the new password should match the following complexity requirements:

- The password must be at least eight characters long
  - The password must contain at least one upper case alphabetic character { A...Z }
  - The password must contain at least one lower case alphabetic character { a....z }
  - The password must contain at least one number {0.....9}
  - The password must contain at least one special character { !, @, #, \$, %, ^, &, \*, (, ), -, , +): }
5. In the **Re-enter new password** field, re-enter the new password.
  6. Click **Save**.

---

## Adding a new user

### About this task

You can add a new user if you are an admin with Add User permission.

### Procedure

1. In the left panel, in **User Management**, click **Users**.
2. Click **Add** ()
3. On the Edit User pop-up window, in the **User name** field, enter the user name for the new user.
4. In the **Role** field, select the type of the user role that you want to assign to the user.
5. In the **New password** field, enter the password for the new user.
6. In the **Re-enter new password** field, re-enter the password for the new user.
7. Click **Save**.

The Dynamic Routing Application displays a confirmation message. The User table displays a list of users with the new User that you added.

---

## Deleting a user

### About this task

You can delete a User only if you are an Admin with Delete User permission. You cannot delete an Admin user.

### Procedure

1. In the left panel, in **User Management**, click **Users**.
2. Do one of the following:
  - From the User table, select the row for the user that you want to delete.
  - Enter the name of the user in the **search** field and click **Search**.

3. Click **Delete** ().
  4. Click **Accept**.
- The Dynamic Routing Application displays a confirmation message.

---

## Modifying a user

### About this task

You can edit the role, user name, or password for another user only if you are an Admin with Update User permission. You cannot modify the details for the default Admin.

### Procedure

1. In the left panel, in **User Management**, click **Users**.
2. To modify a User, do one of the following:

- Double-click the row for the User that you want to modify or
  - Enter the name of the User in the **search** field and click **Search**.
3. In the Edit User window, modify the details of the User.
  4. Click **Save**.

# Chapter 13: User Roles and Permissions

---

## User roles

Routing Admin uses the concept of Roles to give the application administrator the ability to control what users can do within the application. The administrator can manage the user permissions to such tasks as creating and editing destinations, managing other users, changing call segment attributes, etc., by assigning specific roles to each of the users.

Routing Admin has two pre-defined roles: ADMIN and OPERATIONAL. Each role is allowed to perform a set of tasks called Permissions. A Role defines a set of tasks a user assigned that role is allowed to perform. For instance, the ADMIN role encompasses every possible task that can be performed within Routing Admin. Users with OPERATIONAL role cannot create, edit or remove: Users, Roles, Strategy Scripts, Decision Functions, Segmentation Tables and System/Global Properties, but can list and see these items.

The Default Admin user cannot be removed by any user, not even by self.

When a user is created, after first login, the user is prompted to change his password, irrespective of the role. Changing the password is not mandatory and the user can close the pop up, however we recommend our users to change the password.

---

## Permissions

With the Dynamic Routing application you can define specific permissions for each User Role. You can define permissions to view, create, modify, or delete Segmentation Tables, Strategy Settings, Timetables, Decision Functions, Strategy Scripts, Destinations, System Settings, and User Management tasks for Admin and Operational type users.

---

## Defining permissions for a user role

### Procedure

1. In the left pane, in **User Management**, click **Roles**.
2. Double-click the type of User for which you want to define permissions.  
The system displays a window with the list of permissions you can assign to a user..
3. Click the entity for which you want to define the permission.
4. Select one or more of the following check-boxes corresponding to the entity to assign the permissions:
  - **View** checkbox
  - **Add** checkbox
  - **Update** checkbox
  - **Delete** checkbox

5. Click **Save**.

---

## Permissions for different tasks

Name	Description
<b>Decision Management</b>	User can be assigned the permission to view, add, update, and delete the following: <ul style="list-style-type: none"><li>• <b>Segmentation Table</b></li><li>• <b>Strategy Settings</b></li><li>• <b>Timetable</b></li></ul> User can be assigned the permission to only view the <b>Decision Tracer</b> .
<b>Decision Configuration</b>	User can be assigned the permission to view, add, update, and delete the following: <ul style="list-style-type: none"><li>• <b>Decision Function</b></li><li>• <b>Strategy Script</b></li></ul>
<b>Destinations</b>	User can be assigned the permission to view, add, update, and delete the following Destinations: <ul style="list-style-type: none"><li>• Agent Group</li><li>• Service</li><li>• ACD</li><li>• Company</li><li>• Location</li><li>• Application</li></ul>
<b>System Settings</b>	<b>System Property:</b> User can be assigned the permission to view and update System Properties <b>Global Property:</b> User can be assigned the permission to view, add, update, and delete Global Properties.
<b>User Management</b>	User can be assigned the permission to view, add, update, and delete the following: <ul style="list-style-type: none"><li>• <b>User</b></li><li>• <b>Role</b></li></ul>
<b>Interface Access</b>	User can be assigned the permission to retrieve, insert, update, and delete the configuration entities using the following applications: <ul style="list-style-type: none"><li>• <b>Routing Admin</b></li><li>• <b>Admin API</b></li></ul>

## Audit Logs

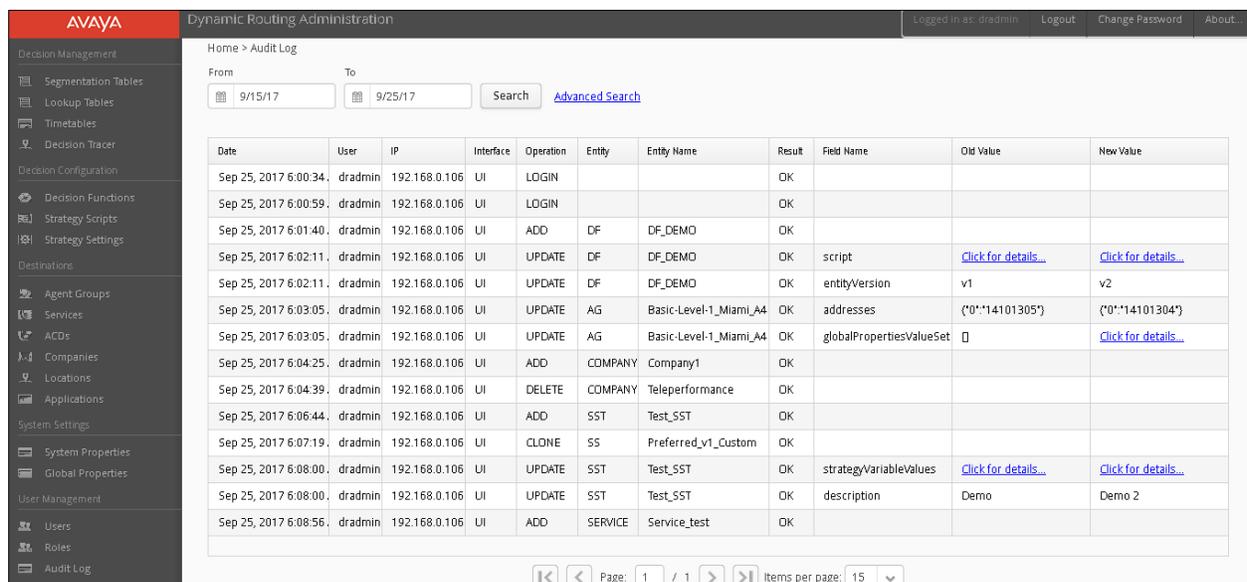
The audit log provides records for any Configuration Change (user operations)  
The audit log files contain an Audit record for each successful user operation.  
The logs are located at  
<DR\_HOME>/platform/gigaspaces/gigaspaces-xap-premium/logs/opt/avaya/dr/platform/gigaspaces-xap-premium/logs.

### Note

These logs are visible to only those users/roles that have permissions.

### Basic search

You can search audit logs based on the logging date as shown in the following screenshot:



The screenshot shows the AVAYA Dynamic Routing Administration interface. The main content area displays the 'Audit Log' search results. The search criteria are set to 'From' 9/15/17 and 'To' 9/25/17. The search results are displayed in a table with the following columns: Date, User, IP, Interface, Operation, Entity, Entity Name, Result, Field Name, Old Value, and New Value.

Date	User	IP	Interface	Operation	Entity	Entity Name	Result	Field Name	Old Value	New Value
Sep 25, 2017 6:00:34	dradmin	192.168.0.106	UI	LOGIN			OK			
Sep 25, 2017 6:00:59	dradmin	192.168.0.106	UI	LOGIN			OK			
Sep 25, 2017 6:01:40	dradmin	192.168.0.106	UI	ADD	DF	DF_DEMO	OK			
Sep 25, 2017 6:02:11	dradmin	192.168.0.106	UI	UPDATE	DF	DF_DEMO	OK	script		<a href="#">Click for details...</a>
Sep 25, 2017 6:02:11	dradmin	192.168.0.106	UI	UPDATE	DF	DF_DEMO	OK	entityVersion	v1	v2
Sep 25, 2017 6:03:05	dradmin	192.168.0.106	UI	UPDATE	AG	Basic-Level-1_Miami_A4	OK	addresses	{'0':'14101305'}	{'0':'14101304'}
Sep 25, 2017 6:03:05	dradmin	192.168.0.106	UI	UPDATE	AG	Basic-Level-1_Miami_A4	OK	globalPropertiesValueSet	{}	<a href="#">Click for details...</a>
Sep 25, 2017 6:04:25	dradmin	192.168.0.106	UI	ADD	COMPANY	Company1	OK			
Sep 25, 2017 6:04:39	dradmin	192.168.0.106	UI	DELETE	COMPANY	Teleperformance	OK			
Sep 25, 2017 6:06:44	dradmin	192.168.0.106	UI	ADD	SST	Test_SST	OK			
Sep 25, 2017 6:07:19	dradmin	192.168.0.106	UI	CLONE	SS	Preferred_v1_Custom	OK			
Sep 25, 2017 6:08:00	dradmin	192.168.0.106	UI	UPDATE	SST	Test_SST	OK	strategyVariableValues		<a href="#">Click for details...</a>
Sep 25, 2017 6:08:00	dradmin	192.168.0.106	UI	UPDATE	SST	Test_SST	OK	description	Demo	Demo 2
Sep 25, 2017 6:08:56	dradmin	192.168.0.106	UI	ADD	SERVICE	Service_test	OK			

Figure 12: Basic search

Here you can provide the **From** and **To** date to perform the basic search operation on the audit logs for the defined period.

### Advanced search

You can also perform the advanced search on the audit logs as per the requirement. You can use the following filters to perform the advanced search:

- From date
- To date
- User name
- IP address
- Interface
- Operation

- Operation Result
- Entity Type
- Entity Name
- Field
- Old Value
- New Value

The following screenshot displays the advanced search filters for audit logs:

The screenshot shows the AVAYA Dynamic Routing Administration interface. The top navigation bar includes the AVAYA logo, the title "Dynamic Routing Administration", and user information: "Logged in as: dradmin", "Logout", "Change Password", and "About...".

The left sidebar contains a navigation menu with categories: Decision Management, Decision Configuration, Decision Functions, Destinations, System Settings, and User Management. The "Audit Log" option is selected under Decision Management.

The main content area is titled "Home > Audit Log". It features a search filter section with the following fields:
 

- From: 9/15/17
- To: 9/25/17
- User: \*
- IP: \*
- Interface: \*
- Operation: \*
- Operation Result: \*
- Entity Type: \* (dropdown menu is open, showing options: DF, USER, AG, LUT, LUT\_ENTRY, ST, ST\_RULE, SS, SST)
- Entity Name: \*
- Field: \*
- Old Value: \*
- New Value: \*

 A "Search" button and a "Back to Basic Search" link are also present.

Below the search filters is a table of audit log entries. The table has the following columns: Date, User, Interface, Operation, Entity, Entity Name, Result, Field Name, Old Value, and New Value. The entries include various operations like LOGIN, ADD, UPDATE, DELETE, and CLONE performed by the user "dradmin" on different entities and fields.

At the bottom of the page, there is a pagination control showing "Page: 1 / 1" and "Items per page: 15".

Figure 13: Advanced search

# Glossary

Term	Meaning
ASM	Avaya Session Manager
AAEP	Avaya Aura Experience Portal
CM	Avaya Communication Manager or "CM Elite" product
DoW	Day of Week
GS	GigaSpaces. It is commonly used to refer to GS XAP.
GSC	GigaSpaces Container
GSM	GigaSpaces Manager
ICR	Intelligent Customer Routing. ICR is an Avaya routing solution on AAEP.
IMDG	In-Memory-Data-Grid or Service Grid is a common term to refer to the memory storage provided by GS XAP
PU	GigaSpaces Processing Unit. It is the packaging format for GS XAP executable.
SMGR	Avaya System Manager is a configuration platform for many Avaya products.
ToD	Time of Day

# Index

<b>A</b>	
add user	
adding user .....	88
administering ACDs	
administering automatic call distribution systems .....	63
administering agent groups .....	60
administering applications.....	67
administering companies.....	64
administering config store properties	
config store properties.....	75
administering destinations .....	60
administering locations.....	66
administering metrics service .....	73
administering platform properties .....	69
administering services .....	62
Administering System Properties	
system properties .....	69
administering users	
administering roles .....	87
<b>C</b>	
call flow	
call-flow.....	18
changing password	
change password .....	87
Counters	
types of counters .....	15
create agent groups .....	60
create segmentation table.....	31
create timetable .....	51
customer intractions	
dynamic routing customer interactions .....	10
<b>D</b>	
data entities .....	12
date definitions	
timetable date definitions.....	49
delete segmentation table.....	37
delete timetable .....	54
delete user	
deleting user .....	88
deleting scripts .....	48
destination aliases	
aliases .....	49
dynamic routing features .....	16
dynamic routing modules.....	11
dynamic routing objective	
high-level objective .....	9
dynamic routing overview	
overview dynamic routing .....	9
<b>E</b>	
examples timetables .....	50
<b>G</b>	
global properties	
administering global properties .....	80
<b>I</b>	
interaction flow	
dynamic routing interaction flow .....	10
<b>L</b>	
logging in .....	20
<b>M</b>	
metrics data .....	86
metrics information	
metrics semaphores .....	14
modify scripts.....	48
modify segmentation table .....	38
modify strategy settings.....	42
modify timetable .....	54
modify user	
edit user .....	88
modifying acd	
editing acd .....	64
monitoring traffic data	
monitoring metrics data .....	85

<b>P</b>	
permissions	
user permissions .....	90

<b>R</b>	
routing admin properties	
administering routing admin .....	71
administering routing admin properties .....	71
routing admin functions	
routing administration features .....	12
routing decision object .....	26
routing service properties .....	70

<b>S</b>	
script variables .....	49
segmentation management elements .....	30

segmentation table use .....	30
segmentation tables overview	
overview segmentation tables .....	30
strategy settings	
strategy scripts .....	40

<b>T</b>	
timetable uses .....	50
timetables .....	49

<b>U</b>	
user roles and permissions .....	90

<b>W</b>	
webm license	
licensing .....	23