Oracle® Advanced Outbound

Implementation Guide

Release 11*i*

August 2002

Part No. B10176-01

ORACLE®

Oracle Advanced Outbound Implementation Guide, Release 11*i*

Part No. B10176-01

Contents

6 Diagnostics and Troubleshooting

Send Us Your Comments

Oracle Advanced Outbound Implementation Guide, Release 11*i*

Part No. B10176-01

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most?

If you find any errors or have any other suggestions for improvement, please indicate the document title and part number, and the chapter, section, and page number (if available). You can send comments to us in the following ways:

- Electronic mail: your_product@us.oracle.com
- FAX: telephone number   Attn: Oracle Your Product Name Here
- Postal service:
  Oracle Corporation
  Oracle Your Product Name Here Documentation
  Street Address, Mailstop
  City, State Postal Code
  Country

If you would like a reply, please give your name, address, telephone number, and (optionally) electronic mail address.

If you have problems with the software, please contact your local Oracle Support Services.

Preface

Audience for This Guide

Welcome to Release 11*i* of the Oracle Advanced Outbound Implementation Guide.

This guide assumes you have a working knowledge of the following:

- The principles and customary practices of your business area.
- Oracle Advanced Outbound

  If you have never used Oracle Advanced Outbound, Oracle suggests you attend one or more of the Oracle Advanced Outbound training classes available through Oracle University.
- The Oracle Applications graphical user interface.

  To learn more about the Oracle Applications graphical user interface, read the *Oracle Applications User's Guide*.

See Other Information Sources for more information about Oracle Applications product information.

How To Use This Guide

This guide contains the information you need to understand and use Oracle Advanced Outbound.

- Chapter 1 - Provides an introduction to the Oracle Interaction Center suite of products and a list of important concepts for Oracle Advanced Outbound.
- Chapter 2 - Provides Advanced Outbound architecture information, minimum software requirements, minimum hardware requirements, and sizing parameters.

- Chapter 3 - Provides dependency requirements for Advanced Outbound.
- Chapter 4 - Provides an overview of the implementation process.
- Chapter 5 - Provides detailed steps for each implementation task mentioned in Chapter 4.
- Glossary - Provides a list of the terms used in this guide and a definition for each.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle Corporation is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program Web site at `http://www.oracle.com/accessibility/`.

Accessibility of Code Examples in Documentation JAWS, a Windows screen reader, may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, JAWS may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation This documentation may contain links to Web sites of other companies or organizations that Oracle Corporation does not own or control. Oracle Corporation neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Other Information Sources

You can choose from many sources of information, including online documentation, training, and support services, to increase your knowledge and understanding of Oracle Advanced Outbound.

If this guide refers you to other Oracle Applications documentation, use only the Release 11*i* versions of those guides.

Online Documentation

All Oracle Applications documentation is available online (HTML or PDF). Online help patches are available on MetaLink.

Related Documentation

Oracle Advanced Outbound shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other product documentation when you set up and use Oracle Advanced Outbound.

You can read the documents online by choosing Library from the expandable menu on your HTML help window, by reading from the Oracle Applications Document Library CD included in your media pack, or by using a Web browser with a URL that your system administrator provides.

If you require printed guides, you can purchase them online from the Oracle Store.

Documents Related to All Products

Oracle Applications User's Guide

This guide explains how to enter data, query, run reports, and navigate using the graphical user interface (GUI) available with this release of Oracle Advanced Outbound (and any other Oracle Applications products). This guide also includes information on setting user profiles, as well as running and reviewing reports and concurrent processes.

You can access this user's guide online by choosing "Getting Started with Oracle Applications" from any Oracle Applications help file.

Documents Related to This Product

Oracle Interaction Center Server Manager Implementation Guide

Oracle Interaction Center Concepts and Procedures Guide

Oracle Marketing Online Implementation Guide

Oracle Marketing Online Concepts and Procedures Guide

Oracle TeleSales Implementation Guide

Oracle TeleSales Concepts and Procedures Guide

Oracle Universal Work Queue Implementation Guide

Oracle Universal Work Queue Concepts and Procedures Guide

Installation and System Administration

Oracle Applications Concepts

This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11*i*. It provides a useful first book to read before an installation of Oracle Applications. This guide also introduces the concepts behind Applications-wide features such as Business Intelligence (BIS), languages and character sets, and Self-Service Web Applications.

Installing Oracle Applications

This guide provides instructions for managing the installation of Oracle Applications products. In Release 11*i*, much of the installation process is handled using Oracle Rapid Install, which minimizes the time to install Oracle Applications, the Oracle8 technology stack, and the Oracle8*i* Server technology stack by automating many of the required steps. This guide contains instructions for using Oracle Rapid Install and lists the tasks you need to perform to finish your installation. You should use this guide in conjunction with individual product user's guides and implementation guides.

Oracle Applications Supplemental CRM Installation Steps

This guide contains specific steps needed to complete installation of a few of the CRM products. The steps should be done immediately following that tasks given in the Installing Oracle Applications guide.

Upgrading Oracle Applications

Refer to this guide if you are upgrading your Oracle Applications Release 10.7 or Release 11.0 products to Release 11*i*. This guide describes the upgrade process and lists database and product-specific upgrade tasks. You must be either at Release 10.7 (NCA, SmartClient, or character mode) or Release 11.0, to upgrade to Release 11*i*. You cannot upgrade to Release 11*i* directly from releases prior to 10.7.

Maintaining Oracle Applications

Use this guide to help you run the various AD utilities, such as AutoUpgrade, AutoPatch, AD Administration, AD Controller, AD Relink, License Manager, and others. It contains how-to steps, screenshots, and other information that you need to run the AD utilities. This guide also provides information on maintaining the Oracle applications file system and database.

Oracle Applications System Administrator's Guide

This guide provides planning and reference information for the Oracle Applications System Administrator. It contains information on how to define security, customize menus and online help, and manage concurrent processing.

Oracle Alert User's Guide

This guide explains how to define periodic and event alerts to monitor the status of your Oracle Applications data.

Oracle Applications Developer's Guide

This guide contains the coding standards followed by the Oracle Applications development staff. It describes the Oracle Application Object Library components needed to implement the Oracle Applications user interface described in the *Oracle Applications User Interface Standards for Forms-Based Products*. It also provides information to help you build your custom Oracle Forms Developer 6*i* forms so that they integrate with Oracle Applications.

Oracle Applications User Interface Standards for Forms-Based Products

This guide contains the user interface (UI) standards followed by the Oracle Applications development staff. It describes the UI for the Oracle Applications products and how to apply this UI to the design of an application built by using Oracle Forms.

Other Implementation Documentation

Oracle eTechnical Reference Manuals

Each eTechnical Reference Manual (eTRM) contains database diagrams and a detailed description of database tables, forms, reports, and programs for a specific Oracle Applications product. This information helps you convert data from your existing applications, integrate Oracle Applications data with non-Oracle applications, and write custom reports for Oracle Applications products. Oracle eTRM is available on Metalink

Oracle Applications Message Reference Manual

This manual describes Oracle Applications messages. This manual is available in HTML format on the documentation CD-ROM for Release 11i.

Oracle CRM Application Foundation Implementation Guide

Many CRM products use components from CRM Application Foundation. Use this guide to correctly implement CRM Application Foundation.

Training and Support

Training

Oracle offers training courses to help you and your staff master Oracle Advanced Outbound and reach full productivity quickly. You have a choice of educational environments. You can attend courses offered by Oracle University at any one of our many Education Centers, you can arrange for our trainers to teach at your facility, or you can use Oracle Learning Network (OLN), Oracle University's online education utility. In addition, Oracle training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization structure, terminology, and data as examples in a customized training session delivered at your own facility.

Support

From on-site support to central support, our team of experienced professionals provides the help and information you need to keep Oracle Advanced Outbound working for you. This team includes your Technical Representative, Account Manager, and Oracle's large staff of consultants and support specialists with expertise in your business area, managing an Oracle8*i* server, and your hardware and software environment.

Oracl*eMetaLink*

Oracl*eMetaLink* is your self-service support connection with web, telephone menu, and e-mail alternatives. Oracle supplies these technologies for your convenience, available 24 hours a day, 7 days a week. With Oracl*eMetaLin*k, you can obtain information and advice from technical libraries and forums, download patches, download the latest documentation, look at bug details, and create or update TARs. To use MetaLink, register at (http://metalink.oracle.com).

Alerts: You should check Oracl*eMetaLink* alerts before you begin to install or upgrade any of your Oracle Applications. Navigate t o t he Alerts page as follows: Technical Libraries/ERP Applications/Applications Installation and Upgrade/Alerts.

Self-Service Toolkit: You may also find information by navigating to the Self-Service Toolkit page as follows: Technical Libraries/ERP Applications/Applications Installation and Upgrade.

Do Not Use Database Tools to Modify Oracle Applications Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using Oracle Applications can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

About Oracle

Oracle Corporation develops and markets an integrated line of software products for database management, applications development, decision support, and office automation, as well as Oracle Applications, an integrated suite of more than 160 software modules for financial management, supply chain management, manufacturing, project systems, human resources and customer relationship management.

Oracle products are available for mainframes, minicomputers, personal computers, network computers and personal digital assistants, allowing organizations to integrate different computers, different operating systems, different networks, and even different database management systems, into a single, unified computing and information resource.

Oracle is the world's leading supplier of software for information management, and the world's second largest software company. Oracle offers its database, tools, and applications products, along with related consulting, education, and support services, in over 145 countries around the world.

1 Introduction

This topic group includes:

- An Overview of Oracle Interaction Center products
- Oracle Advanced Outbound Concepts

1.1 Oracle Interaction Center Overview

Every customer interaction — a telephone call, an e-mail message, or a Web chat conversation — presents an opportunity to win new business or improve customer satisfaction. The Oracle Interaction Center supports the management and processing of customer relationship activity across all channels of customer contact.

The Oracle Interaction Center integrates with several customer relationship business applications in the Oracle E-Business suite. The Oracle Interaction Center consists of several modules. The modules relating to inbound telephony and outbound telephony are bundled separately.

The Oracle Interaction Center allows access to centralized customer information and business application functionality. Oracle Interaction Center integrates with front office (known as Customer Relationship Management or CRM) and back office (Enterprise Relationship Planning or ERP) applications, thereby enabling a workflow powered, end-to-end strategic e-business solution.

The Oracle Interaction Center products include:

- Oracle Advanced Inbound
- Oracle Advanced Outbound
- Oracle eMail Center
- Oracle Scripting

- Oracle Interaction Center Intelligence

1.1.1 Oracle Advanced Inbound

Oracle Advanced Inbound is required to telephony enable business applications in the Oracle eBusiness suite. Telephony-enabled means that the product has the capability of communicating with a telephone system for inbound and or outbound calls via the CTI middleware that handles the messaging between a telephone switch and the user's application. Oracle Advanced Outbound provides the corresponding outbound telephony capability.

The Oracle Advanced Inbound bundle consists of the following products: Call Center Technology, Oracle Universal Work Queue, Oracle Telephony Manager, and Oracle Interaction Blending.

The Oracle Advanced Inbound solution consists of a three-layer server architecture outlined below.

- Telephony platform layer consisting of the Oracle Telephony Adapter Server which provides support for ACD/PBX switches and CTI meddlers provided by third-party vendors
    - ACDs/PBXs: Alcatel 4400, Aspect Call Center, Avaya DEFINITY G3, Cisco® Call Manager (VoIP Agent), Ericsson MD110, Nortel Meridian 1 ACD, Nortel Symposium Call Center Server, Rockwell Spectrum, Siemens HiCom 300E and 330E
    - CTI middlewares: Cisco Intelligent Contact Management (ICM), Intel CT Connect
- Oracle Advanced Inbound Server layer consisting of Oracle Advanced Inbound / Call Center Server processes
    - Oracle Interaction Center Server Manager
    - Oracle Interaction Queuing and Distribution
    - Oracle Telephony Manager
    - Oracle Routing Server
    - Oracle Inbound Telephony Server
    - Oracle Universal Work Queue
    - Oracle Interaction Blending
- Business applications / agent desktop

- Oracle Universal Work Queue desktop (agent desktop work queue)
- Oracle TeleService and/or Oracle TeleSales
- Media Desktop (soft phone)

See Also

- Oracle Advanced Outbound
- Oracle eMail Center
- Oracle Scripting
- Oracle Interaction Center Intelligence

1.1.2 Oracle Advanced Outbound

Oracle Advanced Outbound (AO) is another key part of the Oracle E-Business Suite of applications. It is the module of Oracle Interaction Center that addresses outbound telephony. AO consists of two main components:

- A tactical list manager, which determines who to call and when to call them
- An outbound dialing engine, which dials numbers and transfers live contacts to call center agents

Advanced Outbound integrates with and relies on Oracle Marketing Online (OMO) to create campaigns and lists to execute. AO serves as the execution arm for these marketing lists to maximize both outbound list penetration and agent productivity. AO also integrates with desktop applications like Oracle TeleSales and Oracle Collections to handle the actual customer interactions. Oracle Advanced Outbound can be used any time agents need to contact parties via the telephone.

AO also integrates with Oracle Interaction History to provide feedback that marketers can use to analyze and measure the success of the marketing campaign, thereby providing a closed-loop marketing process.

Note: Oracle Advanced Outbound does not include any other telephony management modules. Oracle Advanced Inbound is required to use Advanced Outbound.

See Also

- Oracle Advanced Inbound

- Oracle eMail Center
- Oracle Scripting
- Oracle Interaction Center Intelligence

1.1.3 Oracle eMail Center

Oracle eMail Center (eMC) is designed to satisfy requirements for inbound customer support, e-mail interaction management, and outbound sales and marketing e-mail message processing.

Oracle eMail Center helps your business respond to e-mail queries with clear and comprehensive replies in a much more efficient manner. eMC automatically generates suggested responses and scores them according to how closely they match the requirements.

See Also

- Oracle Advanced Inbound
- Oracle Advanced Outbound
- Oracle Scripting
- Oracle Interaction Center Intelligence

1.1.4 Oracle Scripting

Oracle Scripting is a set of tools to create and display information sequentially to end users. Oracle Scripting is composed of three components:

- Script Author
- Scripting Engine
- Survey Component

Oracle Scripting end users include interaction center agents (for the Scripting Engine), and customers or prospects using a Web browser (using the Survey component). Other users include individuals who build the scripts (Script Author users) and administrators of scripting or survey campaigns. who may use the Oracle Scripting Survey Admin console.

Using the Script Author, trained script developers use a visual layout development environment to build scripts and survey questionnaires. Using the Script Author tool, developers insert objects into a script and associate properties with each object, including panels, groups and blocks. Panels contain specific prompts geared to the audience of the script (and contain the only elements that will display at runtime). Groups and blocks add code re-use capabilities and the ability to associate Java, PL/SQL, or other commands to a script. These objects control complicated processing and embed business rules that are evaluated at runtime. When completed, scripts are deployed to the Oracle Applications database.

The flow of a script in runtime can be fixed or dynamic, and is controlled by the business rules and on information provided upon script execution. Scripts are executed in a Java GUI in an interaction center (the Scripting Engine), or in a Web browser running JSP pages on a Web server (using the Survey component). Depending on the response to questions asked in the Scripting Engine GUI or the HTML page, the script developer can control the branching, or flow, from one panel to the next within the script. Custom commands can also affect flow of the script. This evaluation takes place in a manner transparent to the user.

The Survey component requires a survey campaign to be defined by an administrator using the Survey Admin console accessible from the eBusiness Center login. This console also provides several reports, which provide feedback to administrators regarding surveys and scripts that have been executed. For scripts, a Footprinting report can assist in tuning scripts by indicating every panel accessed, the order in which it was accessed, and how long the agent spent in each panel. For surveys, the administrator can review individual survey responses or summarized reports for a variety of information.

See Also

- Oracle Advanced Inbound
- Oracle Advanced Outbound
- Oracle eMail Center
- Oracle Interaction Center Intelligence

1.1.5 Oracle Interaction Center Intelligence

Oracle Interaction Center Intelligence is a Web-based reporting solution that provides intelligent reports that facilitate day-to-day operational and long-term strategic decisions.

The data is presented to the user in a easy-to-use portal format. This format gives the user a unified, role-based, easily customized view of Interaction Center information, including Oracle Universal Work Queue information, key performance measures relating to agent productivity, speed to answer, and abandon rate.

The product is built on an Oracle proprietary Java-based technology stack (Oracle CRM Foundation, also known as JTF).Users of Interaction Center Intelligence require minimal training, and no additional software is needed on the user's machine other than a Web browser.

Oracle Interaction Center Intelligence is based on a three-tier architecture:

- The front end (client) using the system via an Oracle Applications-compliant Web browser.
- The middle tier, which contains the Apache Web server and application server, included as part of the installation of Oracle Applications release 11*i*.
- The database tier, using an Oracle 8*i* or 9*i* database.

See Also

- Oracle Advanced Inbound
- Oracle Advanced Outbound
- Oracle eMail Center
- Oracle Scripting

1.2 Oracle Advanced Outbound Concepts

Area Code Mapping

Calling Calendars

Campaign Schedules

Campaigns

Dialing Methods

Dialing Options

Do Not Call

Importing Lists

List Entries

Lists

List Source Types

Outcome, Result, and Reason Codes

Phone Formats

Recycling

Recycling Algorithms

Recycling Algorithm Actions if no Sub-Conditions Met

Recycling Algorithm Conditions

Recycling Algorithm Pre and Post-Processing Actions

Recycling Algorithm Sub-Conditions

Record Filter

Release Priority

Release Strategy

Reports

Server Groups

Subsets

Time Zone Management

Time Zone Mapping

Trading Community Architecture

Validation Report

Validation Rules

VDU Configuration

Voice Messages

1.2.1 Area Code Mapping

An area code is defined as a 3-digit number that identifies each telephone service area in a country (such as the U.S. or Canada).

Area Code Mapping provides a way for Advanced Outbound to find the country to associate a phone number with.

Advanced Outbound provides area code mappings for the US (United States) and CA (Canada). However, if you are processing target groups containing numbers in other countries (whose phone country code does not map uniquely to a territory code), you will need to create the area code mappings for those countries. If your target group contains numbers in only one country, you can create rules defining the area code for the entire target group, and do not need to create these mappings. Additionally, these mappings are used to associate regions (states/provinces) with area codes so that regions can be associated with contact points and used in applying Region Calendars to determine when contact points can be called.

1.2.2 Calling Calendars

A calling calendar defines a set of callable times. Calendars can be associated to geographic locations (countries or regions) or marketing objects (campaign schedules and target groups). Advanced Outbound utilizes three types of calendars:

- Country Calendar
- Region Calendars
- User Defined Calendar

Country Calendar

A country calendar consists of a baseline callable time range for all seven days of the week, as well as any exceptions. Exceptions are most commonly used for holidays, and may be specified by specific date or by pattern (for example, third Friday of each month).

Country calendars are expected to be created based on country-specific laws and are required for Advanced Outbound. There may be cases where it is acceptable to call contact points outside of the range of these laws, user defined calendars allow you to do this.

Every target group entry has one to many contact points. Every contact point (telephone number) must have an associated country code and time zone. Every country code must have an associated calendar. This association creates the base set of callable times for every target group entry. Advanced Outbound ships with country codes for many countries; however, additional country codes can be created and added to the base product as necessary to meet your business needs.

Region Calendar

Region calendars can be used to solve the problem of when certain regions further restrict the callable times from the country they are in. For example, the United States sets the callable time parameters at 9am through 9pm; however, certain states further restrict those hours. These restrictions necessitate the creation of a regional calendar to address the more limited callable hours.

If there are conflicts between the regional calendar and the corresponding country calendar, the country calendar prevails (except when you select **Yes** from the drop-down list in the Override Country Calendar field).

User Defined Calendar

User defined calendars are optional calendars which can be associated with campaign schedules or target groups. These calendars are used to supplement information in the country calendar. If there are conflicts between the user defined calendar and the corresponding country calendar, the country calendar prevails (except when you select **Yes** from the drop-down list in the Override Country Calendar field).

For example, the default calling time in the country calendar you are using is 9AM to 9PM; however, you are only calling businesses and you know that nobody will be present after 6PM. You can create a user defined calendar that adjusts the call time accordingly.

Calendar Example:

Advanced Outbound ships with a default U.S. calendar. It contains the following baseline callable ranges:

Sunday 10AM-8PM

Monday 9AM-9PM

Tuesday 9AM-9PM

Wednesday 9AM-9PM

Thursday 9AM-9PM

Friday 9AM-9PM

Saturday 9AM-8PM

In addition, it contains restricted calling hours for the standard U.S holidays. Note that the callable times are always specified in terms of the local time zone; no time zone specification is necessary. If you wish to prevent calling on a specific target group from 6PM to 8PM on a specific date (for example, Monday, June 4, 2001), you can create an user defined calendar with the following exception information:

06-04-2001 6PM-8PM: no calling

and apply it to the target group.

1.2.3 Campaign Schedules

Campaign schedules are specified within Oracle Marketing Online (by a user with the Oracle Marketing Online Super User responsibility).

Campaign schedules support multiple channels of execution within a marketing campaign. A campaign schedule is the highest-level object associated with Advanced Outbound. target groups are associated to campaign schedules, as are agents. A campaign schedule has a start date and an end date. Multiple campaign schedules can be associated to one marketing campaign, where the campaign schedule is managed as a different execution channel.

The release strategy is executed at the campaign schedule level. When the campaign schedule is created in Oracle Marketing Online, the interaction center administrator designated for campaign schedule approval (via the Marketing Medium specification) will receive notification. The administrator must approve the campaign schedule before it can be executed. This approval process takes place in the Interaction Center Administrators's Personal Homepage, where the workflow item must be approved.

> **Note:** The configuration of campaign schedules takes place both within Oracle Marketing Online and within the Advanced Outbound administration application.

Advanced Outbound only deals with the target groups targeted for outbound telephony execution. In order for Oracle Advanced Outbound to be able to use a campaign schedule from Oracle Marketing Online, the following conditions must be met in OMO:

- The activity must be set to "Telemarketing". This is typically defined as part of the campaign schedule setup type (in the 'Administration' tab for the Oracle Marketing Super User responsibility in HTML applications).
- The campaign schedule's status code must be set to "active". This is set in the 'Administration' tab for the Oracle Marketing Super User responsibility in HTML applications.

1.2.4 Campaigns

A campaign is the organizational unit of a focused marketing effort and campaigns define that marketing effort. Campaigns are a fundamental entity for Oracle Marketing and are never used directly by Advanced Outbound, although they contain the campaign schedules and target groups which are. One marketing campaign can have multiple campaign schedules associated with it and each of these campaign schedules can be targeted for different execution channels. For example a marketing campaign might have a campaign schedule associated with it that is targeted for email execution and another associated with it that is targeted for telephony execution.

1.2.5 Dialing Methods

A dialing method is the mode by which the system dials the customer telephone numbers as it passes the records to the agents. Automated dialing enhances productivity and list penetration because it dials the customer telephone numbers with a reduced chance for error.

Each campaign schedule can have a different dialing method. Advanced Outbound allows you to set up different campaign schedules and lists with different dialing methods. Within a single campaign schedule, different lists can also have different dialing methods. While dialing methods can be set at both the campaign schedule and list level, lists are set by default to use the dialing method of the parent campaign schedule. However, this default can be overridden at any time.

Oracle Advanced Outbound supports the following dialing methods:

- **Preview** - In preview dialing, the list entry information is delivered to the agent-facing application. It is up to the application to initiate the dial programmatically, or for the agent to initiate the dial using the softphone.
- **Progressive** - When progressive dialing is used, Advanced Outbound delivers the list entry information to the desktop application and simultaneously places the dial from the agent's telephone. In the case of a non-connect outcome, it is up to the agent to classify the call.
- **Predictive** - When predictive dialing is selected, Advanced Outbound runs a pacing algorithm, which places dials in advance of agent requests. Advanced Outbound attempts to predict or anticipate when agents will become available and then transfer only live contacts to them. This behavior is customizable through the use of dialing options.
- **Manual** - With manual dialing, there is no CTI; therefore, the agent dials the call by hand.

1.2.6 Dialing Options

Dialing options are used to customize the behavior of predictive dialing. They can be used to set things like:

- The number of rings before a call is considered a 'no answer'
- The abandonment rate for calls
- Answering machine detection level
- The types of calls to transfer to agents
- Whether to play a prerecorded message when an answering machine is detected

1.2.7 Do Not Call (DNC)

In compliance with the Telephone Consumer Protection Act (TCPA), at the request of the call recipient, calls can be blocked so that they will not be dialed by Oracle Advanced Outbound or any other application.

Do not call information is used automatically by Advanced Outbound. TCA defines a flexible model for the specification of contact uses and contact restrictions. The data is actually maintained by applications like Telesales; there is no user interface within Advanced Outbound dealing with DNC information.

For more information on DNC lists, please refer to the specific Oracle business application's documentation.

1.2.8 Importing Lists

The importing of target groups from various sources is an important part of using Advanced Outbound. target groups may be sourced internally, from the Trading Community Architecture database (TCA) or externally either through target group import or by use of Oracle Discoverer. Interaction centers and marketing organizations frequently purchase lists of contacts. This functionality is entirely owned by Oracle Marketing.

1.2.9 List Entries

A list entry is one row in a list. It is occasionally called a record. Currently, each list entry is associated with one party and has one to many contact points. The fields on each list entry are always the same within one list. They are determined by the list source type, which is associated with the list header.

List entries are created when Oracle Marketing generates a list. They contain all necessary denormalized data from other areas of the database with the exception of DNC information.

Oracle Advanced Outbound uses the list entry as the primary, permanent storage area for the record.

1.2.10 Lists

A list is a data structure containing information about one or more customer records. A list does not reproduce the customer database; each record in the list points back to a real customer account in one of your customer databases. More specifically, each record in the list only reflects the subset of fields needed for a screen pop and to meet the list segmentation criteria.

The purpose of a list is to identify a particular segment of customer records. Once a segment has been identified, an administrator can control the conditions under which the records are called.

The term ‘list’ is also used to mean a specific group of list entries. As mentioned above, lists can be used with Advanced Outbound by associating them with the correct type of campaign schedule. Lists are owned by Oracle Marketing Online and are used for many purposes within marketing aside from outbound dialing.

Although different aspects of list headers are configurable from different GUI screens in Oracle Advanced Outbound, the list header structures are the same.

1.2.11 List Source Types

A list source type is a concept used by Oracle Marketing Online to define how fields from the database (typically TCA) map to the columns of a target group entry. A target group entry has several hundred generic columns; a specific list source type, for example, could state that the phone number will go into column 1 and the name will go into column 2. However, a different list source type could populate the first column with name and the second column with phone number.

Oracle Advanced Outbound recycling algorithms and record filters are directly associated to source types because they define which fields are present in a target group.

Oracle Marketing Online ships with two default list source types:

- B to B - Business to Business (Organization Contacts)
- B to C - Business to Consumer (Persons)

Caution: While Oracle Marketing Online allows you to modify the source type fields, you MUST NOT remove or modify the following fields:

Per Customer - Oracle Advanced Outbound requires these fields for each customer. They are either used in the screen pop, or to check for DNC, release control, or the stop list.

- PERSON_FIRST_NAME
- PERSON_LAST_NAME
- PERSON_NAME_SUFFIX
- PERSON_TITLE
- PIN_CODE
- PARTY_NAME
- PARTY_ID
- SOURCE_CODE
- SOURCE_CODE_FOR_ID
- PARTY_SITE_ID
- POSTAL_CODE

Per Phone Number - Oracle Advanced Outbound requires these fields for each phone number.

- CONTACT_POINT_ID
- TIME_ZONE
- PHONE_COUNTRY_CODE
- PHONE_AREA_CODE
- PHONE_NUMBER
- RAW_PHONE_NUMBER
- REASON_CODE

1.2.12 Outcome, Result, and Reason Codes

Outcome, result, and reason codes specify what happened on a dial attempt to contact a customer. These codes are seeded, but are also user-modifiable.

Outcome, results and reasons codes should always be enforced as a hierarchy. That is, the user must always select an outcome before you can select a result and they must select a result before they can select a reason.

If an outcome has no results associated with it, then the user should not be allowed to select a result for that outcome. Also, if an outcome/result combination has no reasons associated with it, then the user should not be allowed to select a reason for that outcome/result combination.

If the outcome selected is designated as requiring a result, then the user must select a result. If only one valid result is set-up for the outcome, then that value should be defaulted for the user. If the result selected is designated as requiring a reason, then the user must select a reason. If only one valid reason is set-up for the result, then that value should be defaulted for the user.

Examples

Outcome Selected = "No Answer" or "Busy"

> The result and reason fields remain disabled. The user cannot set them because no result values are associated to these outcome values.

Outcome selected = "Contact"

> The result field is enabled because two possible results can be selected - "No Sale" or "Sale. The user MUST select a result.

Outcome selected = "Contact", Result selected = "No Sale"

> The reason field is enabled because three possible reasons can be selected for a "No Sale" result - "No Money", "Too Expensive", "Out of Work". The User MUST select a reason.

Outcome selected = "Contact", result selected = "Sale"

> The reason field remains disabled. The user cannot set a reason because no reason values are associated to a result of "Sale".

Call Outcome

A consequence from a dial attempt to contact a customer. 'Outcome' reflects network connectivity (e.g. connect, busy, ring-no-answer, SIT, etc.); a list of system defined outcome codes are defined within Advanced Outbound, others may be user defined.

OUTCOME_ID	OUTCOME_CODE	SHORT_DESCRIPTION
1	No Ans	No Answer
2	Busy	Busy
3	Wrong Num	Wrong Number
4	Not Avail	Not Available
5	Bad Pnum	Bad Phone Number
6	Ans Mach	Answering Machine
7	Contact	Contact
8	Decease	Decease
9	Maint	Maintenance
10	Req Proc	Request Processed
11	Abandoned	Abandoned
12	Bypass	Bypass
13	Change Number	Change Number
14	Delete	Delete
15	Facsimile Tone	Facsimile Tone
16	Incoming	Incoming
17	Invalid for Calling	Invalid for Calling
18	Modem Answer Tone	Modem Answer Tone
19	Not Set Yet	Not Set Yet
20	Priority Callback	Priority Callback
21	Requeued	Requeued
22	Sit Network Busy	Sit Network Busy
23	Sit Operator Intercept	Sit Operator Intercept
24	Sit Reorder	Sit Reorder
25	Sit Vacant	Sit Vacant
26	Unidentified Sit Tone	Unidentified Sit Tone

OUTCOME_ID	OUTCOME_CODE	SHORT_DESCRIPTION
27	Withdrawn During Network Time	Withdrawn During Network Time
28	Withdrawn During Ringing	Withdrawn During Ringing
29	FHM Hangup	FHM Hangup
30	FHM Customer Hangup	FHM Customer Hangup
31	Flunked Stoplist	Flunked Stoplist
32	Unknown	Unknown
33	Dialer Error	Dialer Error
34	Discarded	Discarded
35	No ringback	No ringback
36	No dial tone	No dial tone
37	AO system	AO system
38	Failed release control	Failed release control

Call Result

A consequence from a dial attempt to contact a customer. 'Result' reflects the results of a completed connection and is user/application defined. Examples of 'Results' could include: "Sale" or "No Sale" or "Wrong Party Contact".

RESULT_ID	RESULT_CODE	SHORT_DESCRIPTION
1	NoSale	No Sale
2	Sale	Sale
3	Compl	Customer Complaint
4	Cb	Call Back
5	Multi Act	Multiple Activities
6	Completed	Completed Activity
7	Incompleted	Incompleted Activity
8	Sent	Message Sent
9	Not Sent	Message Not Sent

RESULT_ID	RESULT_CODE	SHORT_DESCRIPTION
	Failed validation	The record failed to be validated
11	Cache expiration	The record expired in the cache

Call Reason

A consequence from a dial attempt to contact a customer. 'Reason' codes are optional user/application defined. It is used to further detail the 'Result' of the call, such as "Too Expensive" or "Using Competitor's Product" or "No Interest"

REASON_ID	REASON_CODE	SHORT_DESCRIPTION
1	No Money	No Money
2	Already Gave	Already Gave
3	Expense	Too Expensive
4	No Work	Out of Work
5	Gave Office	Gave at the Office
6	Other	Other Reason
7	Busy	Too Busy
8	SP Handl Req	Special Handling Required

These codes are owned and administered by Oracle Interaction History. Advanced Outbound references these codes in its recycling algorithms and record filters.

1.2.13 Phone Formats

Phone formats must be created for each country that you will be calling in your lists. Advanced Outbound ships with the phone formats for the United States and Canada. Additional phone formats can be created by logging into the Oracle Forms Application with the Trading Community Manager responsibility. For more information on creating phone formats, refer to the Creating Phone formats topic in the *Oracle Advanced Outbound Implementation Guide*.

1.2.14 Recycling

Recycling is the process of determining how to process records that have been dialed. When a record is returned, a user-definable recycling algorithm is executed, which looks at the record, the call results, and previous calls to the record.

Recycling strategies are based on:

- Call outcome
- Date, day, and time of call
- Number of call attempts

For example, if a call ends up with a status of “Busy,” you can assume that it’s likely that the decision maker is at home; therefore, you will probably want to call the customer back within a few minutes. Advanced Outbound can automatically schedule a record with a busy outcome to be attempted in 10 minutes. On the next attempt, if the line is still busy, Advanced Outbound can call back the customer in another 15 minutes.

Likewise, if there is a “No Answer” in the morning, Advanced Outbound may schedule the next call to be attempted during the afternoon of the same day.

Call recycling also occurs for target groups that have contact outcomes. For instance, some applications automatically schedule callbacks after a call has resulted in a literature request. The application may schedule a callback for five days in the future, giving the customer time to receive and review the mailing. After the five days have passed, Advanced Outbound automatically calls the customer back, allowing the agent to reinforce the information sent by mail and close the sale.

Oracle Advanced Outbound provides a GUI that allows you to create and modify recycling algorithms.

Recycling provides the following benefits:

- Recycling ensures optimal list penetration and contact rates through intelligent scheduling of callbacks.
- The recycling strategy can be modified using the user friendly GUI provided in Advanced Outbound.
- Each list can have its own recycling strategy or share a recycling strategy.

Possible Actions for Recycling

- Call back at date
- Call back in interval

- Call back in n days
- Call back next <day of week>
- Call back next <day of week> at
- Call back next month
- Call back next month at
- Call back next week
- Call back next weekday
- Call back next weekday at
- Call back next weekend day
- Call back next weekend day at
- Call back next week at
- Call back today at
- Call back tomorrow
- Call back tomorrow at
- Do not use record
- Move record to list
- Use next phone number

Possible Conditional Check Commands

Condition	Description
List field is	Checks a field in the call record for a specific value
Call attempt is	Checks the number of call attempts made on this record
Outcome of the nth previous call is	Checks n consecutive previous call attempts for a specific outcome
Outcome code is	Checks value of the outcome code returned from the interaction
Result code is	Checks the value of the result code returned from the interaction
Reason code is	Checks the value of the reason code returned from the interaction

Condition	Description
Call attempt on current contact point is	Checks the value of current call attempt to this contact point
Consecutive outcome to current contact point is	Checks the value of the outcome of current call attempt to this contact point
The day of the week is...	This condition allows you to recycle a record based on what day of the week it is or is not when the record is called.
The time of nth call is...	This condition allows you to recycle a call based on what time of the day it was when a previous call attempt was made for this record. The specified number (n) stands for the number of calls ago. The number you specify for "n" must be within the last 20 calls. For example, if you have a calling plan that begins calling records on a Mon - Wed - Fri basis then switches to Tues - Thurs calling if no connects are achieved, you could use this algorithm to dictate when a record should shift from the Mon - Wed - Fri pattern to the Tues - Thurs pattern.

1.2.15 Recycling Algorithms

Recycling is the process of determining how to process records that have been dialed. When a record is returned, a user-definable recycling algorithm is executed, which looks at the record, the call results, and previous calls to the record.

When creating a recycling algorithm, you must first decide whether you will use an existing algorithm as a model for your new one, or whether you want to create a completely new algorithm. If an existing algorithm contains relatively similar pre or post-processing actions, conditions or sub-conditions, you should use it as a basis for your new algorithm. The Advanced Outbound HTML Administration console allows you to do this by permitting you to copy existing algorithms. If your new algorithm will be significantly different from any existing ones, you should create a completely new algorithm.

You must then add or modify pre or post-processing actions (not required), or the conditions or sub-conditions for the algorithm. You then need to add an action for each condition or sub-condition. These actions will determine how the record is handled if the condition or sub-condition under which you add it is met.

Important: Each condition or sub-condition must have an associated action or you will receive an error.

1.2.16 Recycling Algorithm Actions Performed if no Sub-Condition Are Met

Actions if no sub-conditions are met are pre-seeded actions that you can add to the root level, a condition, or a sub-condition that establish a method of handling the record in the event the top level conditions or sub-conditions under that top level condition are not met. If a condition or sub-condition is met, it's associated action will be utilized. However if no conditions or sub-conditions are met, none of their actions will be utilized; therefore, you must add an action if no sub-conditions are met to handle these occasions.

For example, if you had the following condition and sub-condition statement:

Condition 1: Outcome code equal to No Answer

Sub-condition 1: Call attempt equal to One

Sub-condition 2: Call attempt equal to Two

Sub-condition 3: Call attempt equal to Three

To each of these sub-conditions you can add an action which will determine what happens to the record if no sub-condition are met. For the first call attempt, you could add an action of **Call back next Monday**. For the second attempt, you could add an action of **Call back next Saturday at 11:30**. For the third call attempt, you could add an action of **Call back next week**. By adding an action for each sub-condition, you can set up different processing paths for each separate call attempt.

1.2.17 Recycling Algorithm Conditions

Conditions determine how the algorithm processes records that have been dialed. Conditions are composed of three parts:

- A condition
- An operator
- A value

To avoid confusion, since the first component of the condition is also called a condition, we refer to the entire statement (condition, operator, and value) as an expression. Expressions are structured in the following order: *condition operator* *value*. For example: *STATUS contains ACTIVE* (where *STATUS* is the condition, *contains* is the operator, and *ACTIVE* is the value), or: *HOUSEHOLD_SIZE greater than 3* (where *HOUSEHOLD_SIZE* is the condition, *greater than* is the operator, and *3* is the value).

The Oracle Advanced Outbound HTML Administration console displays conditions and their sub-conditions in a treeview model.

Example:

Condition 1

    Sub-condition 1

    Sub-condition 2

Condition 2

    Sub-condition 1

In the above example, Condition 1 and Condition 2 are top level conditions. If you want to have more than one expression in a single condition, it is very important how the expressions are joined (by AND or by OR).

If you want to have multiple top level conditions in your recycling algorithm, their order is very important. Once a condition is met, Oracle Advanced Outbound ignores all other conditions at the same level and only completes execution for the process within that condition block. In the above example, if Condition 1 is met, then Condition 2 (and Sub-condition 1 under Condition 2) will be ignored.

1.2.18 Recycling Algorithm Pre and Post-Processing Actions

Recycling algorithms utilize pre and post-processing actions to determine what happens to records before and after (respectively) the conditions apply.

Pre and post-processing actions are pre-seeded statements. The pre and post-processing areas in the Advanced Outbound HTML Administration console allow you to access and utilize these pre-seeded statements. These statements allow you to do virtually anything you want before or after (respectively) the conditions of the recycling algorithm - check for any condition you want and then take action based on the checked conditions, or initialize or clear variables needed during the recycling process.

1.2.19 Recycling Algorithm Sub-Conditions

Sub-conditions allow you to further refine how each condition in your algorithm handles dialed records. For example, you could have the following condition statement:

- Outcome code equal to No Answer

For this condition statement you could add sub-conditions that further define how the condition processes dialed records. For example, you could add the following sub-conditions to the Outcome code equals No Answer condition:

  - Call attempt equal to One
  - Call attempt equal to Two
  - Call attempt equal to Three

By adding these sub-conditions, you can establish a different handling procedure for each calling attempt. Each of these sub-conditions will need an action added to it to determine how Advanced Outbound handles the call attempt if none of the sub-conditions are met. For more information on adding actions, refer to the Adding Actions if no Sub-Conditions are met topic.

1.2.20 Record Filter

Record filters are filters against which records are checked at the point of release. Record filters are created and applied to lists. They are able to check fields of list entries. Record filters check release fields to ensure they match defined parameters (STATE equal to Virginia). A match here will prevent the release of the record.

The record filter process occurs after a record is selected and provides a last minute means to filter records from being called. If a record does not pass the release checkpoint process, the record will be recycled according to the rules defined for recycling processing.

The release criterion should be defined in an SQL statement where any field(s) available in AMS_LIST_ENTRIES table may be used as a criterion.

Record filters utilize expressions in a similar manner as recycling algorithms. However, instead of being called conditions, they are called rules. They use the following three components:

- Field
- Operator
- Value

Record filter rules are structured in the following order: *field operator value*. For example: *PERSON_FIRST_NAME equal to James* (where *PERSON_FIRST_NAME* is the field, *equal to* is the operator, and *James* is the value). The combination of these three elements (field, operator, and value) is called an expression.

The Oracle Advanced Outbound HTML Administration console displays rules in an alphanumeric hierarchy.

Example:

Rule 1

PERSON_LAST_NAME begins with W OR PERSON_LAST_NAME begins with B

AND PERSON_FIRST_NAME equal to James

OR Rule 2

PARTY_ID greater than 1200 AND PARTY_ID less than 2500

OR Rule 3

CUSTOMER_KEY has a value

In the above example, the lines under each rule are conditions for that rule.You can have multiple expressions in a single condition (as seen under Rule 2) and you can have multiple conditions under a single rule (as seen in Rule 1). If you want to have more than one expression in a condition, or more than one condition in a rule, it is very important how the they are joined together (by AND or by OR).

Separate top level rules are *only* joined together by **OR**; however multiple expressions within a single condition, and multiple sub-conditions within a single rule can be joined by either **AND** or **OR**.

If you want to have multiple top level rules in your record filter, their order is very important. Once a rule is met, Oracle Advanced Outbound ignores all other rules at the same level and only completes execution for the process within that set of rules. In the above example, if Rule 1 is met, then Rule 2 and Rule 3 are ignored.

1.2.21 Release Priority

Release priorities determine the relative priority of a list or subset in comparison to other lists and subsets. Advanced Outbound utilizes the AMS_list_priority lookup code for release priority.

Every list and subset has a release priority. Priorities allow Advanced Outbound to distinguish between “high” priority lists and “low” priority lists. The priority selections Advanced Outbound supports are:

- Highest (1)
- High (25)
- Medium (50)
- Low (75)
- Lowest (100)

Highest through Medium level priorities are preemptive; all lists with priorities in this range will be exhausted in priority sequence before the next priority level is used. Low and Lowest priorities are used in round-robin fashion; each of these lists will release its quantum of records, then the next list in the same priority level will be used.

Oracle often recommends that time-based lists (for example, the Busy and Priority Callback lists) have higher priorities, and that all other lists have lower priorities. This insures that records that need to be called back at specific dates and times are called before those that have no assigned callback dates and times. When Advanced Outbound sees that no records are available in the time-based lists (because they are scheduled for future callback), then it automatically begins the round-robin process among lists with lower priorities.

1.2.22 Release Strategy

Release strategy is a broad concept which describes how Advanced Outbound releases records from lists and subsets. Oracle Advanced Outbound supports the following types of release strategies:

- **Quantum**
- **Quota**

An additional factor affecting release strategy is priority. Both lists and subsets have priorities which influence release strategy.

1.2.22.1 Quantum Release Strategy

The quantum release strategy supports proportional calling across all lists and subsets associated with the campaign strategy and it is considered the baseline strategy for an Advanced Outbound service.

The list quantum controls the number of records that can be sequentially dispersed from a list or subset. This means that when Advanced Outbound is distributing customer records to agents, it releases a quantum number of records from each list or subset before it goes on to the next list or subset in the campaign.

Every list and subset has a quantum which you can dynamically adjust via Advanced Outbound. Usually, a list or subset's quantum is adjusted to reflect the proportion of customer records in that list or subset compared to other lists or subsets in the campaign.

Without the concept of a quantum, Advanced Outbound would read all records from one list or subset before moving on to another list or subset. This would exhaust each list or subset in order. While a strategy of this sort may be useful in some instances (for instances, in a Collections application, where you want all of the 60-day overdue customers called before the 30-day customers), you generally want a mix of records from different lists or subsets.

1.2.22.2 Quota Release Strategy

The Quota Release Strategy stops releasing records from a list or subset when a pre-defined limit has been reached.

This strategy disburses records from a list or subset based on the quota that is assigned to a list or subset. A quota represents the maximum number of records with a certain outcome or result that should be obtained from that list or subset during a pre-defined period of time (set by a Quota Reset Period value).

Quotas are reset at the end of a quota reset period (defined at the list or subset level), so that the list or subset is again available for calling. The raw values used to calculate the quota are dependent upon the outcome codes of each record and must be passed by the agent business applications to Advanced Outbound.

Due to its pre-defined limit, the Quota Release Strategy is useful for survey or appointment setting campaigns.

1.2.23 Generating Reports

Call centers are dynamic environments; being armed with real-time information is critical in decisions such as managing list depletion/exhaustion and managing the productivity of the interaction center agents.

Advanced Outbound logs information to two areas: Interaction History and Interaction Center Intelligence.

Information logged into Interaction History contains only dial attempts made by Advanced Outbound that did not result in a call connect, therefore was not forwarded to an agent. The log entries in Interaction History from Advanced Outbound help to build a complete picture of calling efforts. Calls that were completed and transfer to an agent application will have log entries from the agent application. The combination of log entries from both sources will provide a complete view of the calling effort and its results.

Information logged into Interaction Center Intelligence (ICI) is for the purpose of providing some real-time reports on the dialing efforts. Information feed to CCI is done on an interval basis, and reflects up-to-date information on the interaction center performance such as: break down of the types of calls made, break down of call outcomes, limited agent information in terms of number of agents, and break down of records left to be dial.

Advanced Outbound allows you to generate the following reports:

Report Name	Report Description
Agent Call Results Detail	Provides call center administrators with a view of the distribution of call results among the agents for a given campaign that is currently active in the call center. Statistical data for the report only incorporates data since the specified beginning time period, where the maximum page is set at 24 hours. Data beyond the maximum period may be obtained through an Interaction Center Intelligence equivalent report.
Agent Performance	Provides you with a view of the distribution of call results among lists and subsets for a given campaign that is currently active in the call center. Statistical data for the report only incorporates data since the specified beginning time period, where the maximum page is set at 24 hours. Data beyond the maximum period may be obtained through an Interaction Center Intelligence equivalent report.
Campaign Schedule Call Results Detail	Provides you with a view of the distribution of call results among lists and subsets for a given campaign that is currently active in the call center. Statistical data for the report only incorporates data since the specified beginning time period, where the maximum page is set at 24 hours. Data beyond the maximum period may be obtained through an Interaction Center Intelligence equivalent report.

Report Name	Report Description
Campaign Schedule Dialing Statistics	Provides you with an ability to evaluate the efficiencies of a campaign schedule calling effort. Statistical data for the report only incorporates data since the specified beginning time period, where the maximum page is set at 24 hours. Data beyond the maximum period may be obtained through an Interaction Center Intelligence equivalent report.
Campaign Schedule Outcome Summary	Provides you with a view of the distribution of call outcomes and results for a given campaign that is currently active in the call center. Statistical data for the report only incorporates data since the specified beginning time period, where the maximum page is set at 24 hours. Data beyond the maximum period may be obtained through an Interaction Center Intelligence equivalent report.
Campaign Schedule Record Detail Statistics	Provides you with a detailed view of the distribution of records for one active campaign schedule. Statistical data for the report reflects back to when the campaign schedule has become active.
Campaign Schedule Record Summary Statistics	Provides you with a quick glance view of the distribution of records for all campaigns that are currently active in the call center. Statistical data for the report reflects back to when the campaign schedule has become active.
Campaign Schedule Time Zone Detail	Provides you with a detailed view of how many of the records in the selected campaign schedule fall in each time zone within the selected time zone range.

1.2.24 Server Groups

A server group is also known as an interaction center. Interaction center servers (e.g. UWQ, OTM) typically belong to a server group. An exception to this is the Advanced Outbound Central Server, which exists one per CRM instance. A server group typically represents the concept of a call center, but this is not required.

Agents are assigned to server groups using Oracle CRM Resource Manager. Servers are assigned to server groups using the Interaction Center Server Manager (ICSM) interface, which requires the Call Center HTML Administrator responsibility.

1.2.25 Subsets

A subset is a set of entries within a list identified by field values. Subsets are dynamic, and can be created and deleted at will within the context of a list.

When subsets are used, a default subset is created that contains any list entries not contained in the user-defined subsets. List entries existing in subsets that overlap are available to all subsets until they are released.

You create list subsets by designating conditions. When records meet the designated conditions they are placed in the list subset. Conditions are composed of three parts:

- A field
- An operator
- A field value

Conditions are structured in the following order: *field operator field value.*

Condition Structure Example

ADDRESS contains VA - where *ADDRESS* is the field, *contains* is the operator, and *VA* is the field value.

Subset Example

A call center administrator has a list containing a generated score in the field called 'SCORE.' This contains values from 1 to 5. Additionally, a field called 'STATE' of the score value, the administrator would like to create the following subsets:

Subset 1: SCORE = 5

Subset 2: SCORE = 3 or SCORE = 4

The marketing campaign is expected to get much better results in New York, so an additional subset is created:

Subset 3: STATE = 'NY'

The default subset at this point contains list entries that match:

- scores that do not equal 5
- scores that do not equal 3 or 4
- all states except New York

Each of these subsets can be given its own priority, quantum, or quota value. If the interaction center administrator decides that there may be a possible difference in results between the score value of three and four, they can create a new subset:

Subset 4: SCORE = 4

and edit the existing subset 2:

Subset 2: SCORE = 3

1.2.26 Time Zone Management

Advanced Outbound manages time zones transparently to the call center administrator. As mentioned earlier, this is dependent on every contact point (telephone number) having an associated country code and time zone value. All of these items are owned by TCA. All countries represented in a calling list must be mapped to a time zone.

Time Zone Mapping

If your data does not provide time zone information for your contact points, and you cannot use the validation rules to specify the time zone at the list level, then you will need to create time zone mappings in order to validate your lists.

There are three different types of time zone mappings.

- Mapping a territory code to a time zone.
- Mapping a territory code and area code to a time zone.
- Mapping a territory code, area code, and postal code to a time zone.

Even if this type of mapping exists, postal codes cannot be used in determining the appropriate time zone unless a validation rule is created (and associated with desired list(s)) to enable such mapping lookups

In general, you should try to use the first type of mapping as it allows for the best validation performance and requires the least amount of effort to create. However, there are certain countries split among different time zones, and the second type of mapping is required to accurately determine the correct time zone. You should only create the third type of mapping when absolutely necessary as it leads to a large number of records in the time zone mapping table, reducing the performance of lookups.

1.2.27 Time Zone Mapping

Advanced Outbound contains time zone mapping tables that must be defined. Many countries only occupy a single time zone, but others are spread across multiple time zones. If your interaction center plans to make calls throughout countries (for example: United States or Canada) where many states and provinces fall in different time zones, you may need to provide the state/region postal codes and area codes to determine that Advanced Outbound is using the correct time zone for the customer. There are database load utilities readily available within the database that can be used to upload purchased data into the Advanced Outbound Schema.

To ensure that customers are called at the appropriate times, Advanced Outbound must know where the person resides in relation to time zones. This way Advanced Outbound can follow the appropriate telemarketing laws that govern calling in their particular country, state, country or city.

The time zone mapping form is used as an easy entry point to provide Advanced Outbound with a method to call customers or contacts.

At a minimum, the country code and time zone must be entered for each country that an interaction center will contact. It is mandatory that all countries map their time zone with their country name.

For single time zone countries, no further information is needed.

For countries with more than one time zone, it is recommended that you map the appropriate time zone, country code, and optional area code, postal code, state/region information to assist Advanced Outbound during list validation time. By utilizing the address specific information, Advanced Outbound can match a customer record with the appropriate time zone and country if their customer record is incomplete.

This functionality is especially important in countries where there are multiple time zones. For example, the United States has eight time zones spanning from Saipan, Northern Mariana Islands, U.S.A. (Standard time zone: UTC/GMT +10 hours where daylight saving time currently not observed) and Honolulu, Hawaii, U.S.A. (Standard time zone: UTC/GMT -10 hours where daylight saving time currently not observed). In addition, there are many states who have either multiple time zones and may or may not participate in daylight savings time.

For example: the state of Indiana has up to three different time zones depending on the location in the state. To ensure we call the customer at the correct time, we need to know exactly where the customer is and follow the laws for their state. In this case, Advanced Outbound may need to go down to the postal code to ensure that the correct time zone is being used for the customer record.

1.2.28 Trading Community Architecture

The Trading Community Architecture (TCA) is a customer model designed to support complex trading communities. TCA strives to model *all* relationships within a trading community. For example, the trading community of an appliance manufacturer may include suppliers, distributors, resellers, retailers, service providers, business consumers, and end users. The appliance manufacturer not only wishes to track relationships between itself and other entities within this trading community, it also takes an interest in relationships that other community members have with each other. The manufacturer may not even have direct relationships with all such members; nevertheless, it needs to know about them and how each relates to other entities within the community.

The TCA architecture is unique to the Oracle E-Business Suite and differentiates it from other products through the following capabilities:

Single Source of Truth

Because the entire Oracle E-Business Suite uses the TCA customer model, Oracle offers users a single source of truth for customer data. A customer record is exactly the same whether it is viewed through Oracle Sales Online, Oracle Marketing Online, Oracle Customer Care, Oracle Financials, or Oracle iStore.

The "Party" Concept

The concept of party enables the customer model to treat all business entities equally. This means that each customer, regardless of type (organization, person, group, or relationship), is handled in the same way by the model.

Because all business entities are treated alike, the customer model can easily handle B2B, B2C, or mixed business models. Although the model tracks attributes for people different from those it tracks for organizations (e.g., date of birth, title, and gender for people; DUNS number, SIC code, and fiscal year end for organizations), both people and organizations are parties, and their records are therefore stored in the same physical table in the database. This in turn means that the same business relationships that can be formed with an organization can be formed with a person.

Any number of parties can be grouped into a single entity. This allows the modeling of complex business entities such as households and buying consortiums. A group can be viewed as a single entity; meanwhile, each of its members can still be viewed as a distinct entity.

The relationship between two parties may be viewed as a party in its own right. For example, if John works at Oracle, three parties could exist: John (party of type **person**), Oracle (party of type **organization**), and John@Oracle (party of type **relationship**). Because John@Oracle is a party in its own right, addresses, phone numbers, and customer accounts can be directly associated with the John@Oracle entity.

The customer models of other products typically treat organizations and people as entities of two distinct types, which makes dealing with mixed business models difficult. Many CRM products on the market today were originally designed to support only a B2B business model In a pure B2B environment, customers are always organizations and people are simply contacts for those organizations. For such models, it makes sense to distinguish organizations from people and to provide functionalities specific to each. For example, in a pure B2B environment, the data model would probably support associating leads, opportunities, and accounts with organizations but not with people (because people would be simply contacts for organizations, not customers).

As CRM vendors came to realize that their models needed to support B2C and mixed models as well, they began trying to reshape their existing B2B-only models. In many cases, the result is a data model designed for B2B with a few patches to support basic B2C functionality.

The "party" data is maintained by the Oracle business applications (TeleSales, Customer Care, etc.), and it is populated into a list by Oracle Marketing Online on a one "party" per list entry basis. Based on the source type, different data will be pulled into the list entry.

Many-to-Many Relationships

The customer model supports many-to-many relationships between parties and locations (i.e., addresses). Because an address can be associated with multiple parties, the address need not be duplicated; if it changes, it only has to be updated once.

Advanced Relationship Modeling

The customer model stores party relationships as distinct entities, allowing any party to be a member of any number of relationships. Additionally, because each relationship has a specific type (e.g., parent of, employee of, subsidiary of, reseller for), two parties can have multiple relationships with each other (e.g., John is the spouse of Mary, but John is also the business partner of Mary). Many other customer models hard-code relationships into person or organization entities; for example, the record for a person might have a Manager column to identify the person’s manager. This method of defining relationships is very rigid: it limits both the number of relationships that can be recorded for an entity and the number of types of such relationships. By contrast, the TCA customer model, though it comes with several seeded relationship types, allows customers to define any number of additional types.

The Oracle customer model also supports matrix hierarchies (relationship networks). This means that any party record may have one or more parent records. Additionally, the customer model supports non-hierarchical relationships such as spouse of and partner of. Other customer models tend to offer only simple hierarchies in which each record may have only one parent and non-hierarchical relationships are not supported.

The Oracle customer model supports current and historical relationships. Because party relationships are stored in their own table, they can have their own attributes. The two key attributes for historical relationship information are *start date* and *end date*. When a party relationship ends, the application prompts the user to provide an end date for the relationship instead of deleting the relationship record.

Thus valuable relationship history may be maintained indefinitely. In many other customer models, contrariwise, relationships are hard-coded: this requires a new relationship to replace a prior one, with the loss of the associated historical information.

Separation of Party and Customer Account

The Oracle customer model separates the business entity (party) from the business relationship (e.g., customer of). This allows each party to have multiple customer accounts (i.e., to have multiple business relationships with any other party). Additional parties (e.g., an authorized buyer or guarantor) can also be associated with any customer account.

Flexible Party Classifications

The customer model allows for any number of user-defined party classifications, which can be used for reporting and assignment purposes. A user may wish to stratify customers by industry, size, and buying behavior. The user decides not only these categories but also the classes (or values) within each category. Classes can then be broken down into subclasses, which allows for rollup and reporting at different class levels. Such structures can also facilitate assignments.

Contact Point

The contact point includes the telephone number and the phone type. This data is maintained by the Oracle business application (TeleSales, Customer Care, etc.). It is populated into the list by Oracle Marketing Online and dialed by Oracle Advanced Outbound.

Contact Restriction

Contact restriction determines how the Do Not Call (DNC) list is implemented. This data is based on a *per party* basis nd it is checked by Oracle Advanced Outbound at the time of record release.

Contact Preference

Contact preference is based on a per contact point basis. This data is maintained by the Oracle business application (TeleSales, Customer Care, etc.) and is checked by Oracle Advanced Outbound at the time or record release.

Time Zones

Time zones are seeded in TCA and are not maintained by any application.

Phone Formats

The phone format defines the phone number format and area code length. This data is maintained by using the Trading Community Manager responsibility.

1.2.29 Validation Report

A View Report column has been added to the summary view table of existing lists on the Interaction Center Campaign Schedule Target Groups page. Clicking the View Report hyperlink provided in this column generates a report furnishing the following information:

Row/Column Name	Description
Validation Status	Shows whether or not the selected list is validated.
Number of Valid Records	Shows the number of validated records within the selected list.
Number of Invalid Records	Shows the number of records that failed validation within the selected list.
Reason for Invalidity	Provides a reason why each Number of Records column entry failed validation.

1.2.30 Validation Rules

Validation rules are composed of actions and these rules allow you to make exceptions to the automatic list validation process. For example, you can use validation rules when you don’t know the country code or timezone, but you know you will be dialing calls in a certain timezone. If the country code or timezone is not known these records will fail the list validation process and will not be dialed. You can set a validation rule to allow you to dial these records because you are confident of what is in the list. By doing this, you can prevent these calls from failing the list validation process, and thereby not being dialed.

The order of these actions is very important. Advanced Outbound reads the actions from top to bottom. When the first action fails, the rest of the actions under it are ignored. Therefore, you should put the most generic actions at the top. This strategy will conserve processing time.

Validation Rule Actions

Rule Action	Description
Specify Phone Country Code For Entire List	This action allows you to specify the phone country code at the list level. The phone country code refers to the country code used when dialing a number. For example, the phone country code for US and Canada is 1. This rule is useful when every number in a list uses the same phone country code, and that phone country code is not specified in the phone country code attribute of the contact point. A complete list of valid phone country codes can be found in the HZ_PHONE_COUNTRY_CODES table.
Specify Territory Code For Entire List	This action allows you to specify the territory code at the list level. The territory code refers to the ISO country code (i.e. 'US' for the United States and 'CA' for Canada). A complete list of valid territory codes can be found in the FND_TERRITORIES table. This rule is useful when every number in a list is within a single territory, and the corresponding phone country code is not specified in the phone country code attribute of the contact point.
Enable Incremental Parsing of Phone Area Codes	This rule allows you to enable incremental parsing of area codes from the phone number and raw phone number attributes. This allows validation to parse the area code from the phone number attribute, by iteratively comparing the area code digits to a list of valid area codes (in IEC_G_CC_AC_TC_MAPS) until the correct match is found. There must be entries for all of the potential area codes in IEC_G_CC_AC_TC_MAPS in order to successfully parse the area code. The US and CA area codes are provided.
Enable Incremental Parsing of Phone Country Codes	This rule allows you to enable incremental parsing of phone country codes from the raw phone number attributes. This allows validation to parse the phone country code from the raw phone number attribute, by iteratively comparing the phone country code digits to a list of valid phone country codes (in HZ_PHONE_COUNTRY_CODES) until the correct match is found. There must be entries for all of the potential phone country codes in HZ_PHONE_COUNTRY_CODES in order to successfully parse the phone country code. The data for most (if not all) countries is provided.

Rule Action	Description
Specify Time Zone For Entire List	This rule allows you to specify the time zone at the list level. This rule is useful if every contact point in the list belongs to the same time zone that is known by the administrator, and/or time zone data is not provided for the contact points. This option will also speed the validation process since less work will be done to determine the correct time zone.
Specify Time Zone Format For Entire List	This rule allows you to specify the format of the time zone data being provided for the contact points at the list level. The accepted formats are time zone id, time zone offset, and time zone descriptive name (i.e. EST, PST). Time zone id is the default format if this rule is not configured. This rule is generally to be used in conjunction with the Create Time Zone Offset/Name Mapping rule.
Create Time Zone Offset/Name Mapping	This rule allows you to create mappings to associate a time zone name/offset with a time zone id from HZ_TIMEZONES. When time zone data is being provided as either GMT offset or descriptive name, there are potentially many time zones mapping to a single offset/name (some of which recognize daylight savings time, and others that do not). In this situation, it is impossible to determine what the correct time zone is based on either the GMT offset or descriptive name. By creating a mapping for each GMT offset or descriptive name provided in the time zone attribute of the contact points, the correct time zone can be easily determined.
Enable Unconditional Use of Time Zone Mappings	This rule allows you to enable the unconditional use of time zone mappings at the list level. This allows the time zone mappings to over-ride time zone data provided in the contact point's time zone attribute since the mappings are likely to be more accurate than specifying the time zone by either GMT offset or time zone name. This rule should not be created unless you have loaded the time zone mappings into IEC_G_TIMEZONE_MAPPINGS.
Enable Use of Postal Codes In Time Zone Mapping Lookup	This rule allows you to enable the use of postal codes while performing time zone mapping lookups. There are only a few cases when this data is necessary to determine the correct time zone, and this functionality will slow validation considerably.

Rule Action	Description
Specify Region For Entire List	This action allows you to specify the region (state/province) at the list level. Regions are stored in the JTF_LOC_AREAS_VL and are created/updated in Oracle Marketing Online (Administration/Marketing/Geography). Advanced Outbound only recognizes locations of type STATE as regions. This rule is only useful when every phone number in a list is within a single region and the region is not specified via an Area Code Mapping.
Require that a Contact Point Have a Region to Pass Validation	This rule allows you to require that a contact point have a region to pass validation. This is recommended if the administrator only wants to call contact points for which a region calendar can be used to determine whether or not the contact point is callable.

Validation Rule Example:

A contact point has a time zone equal to EST. Since EST corresponds to two different time zones (United States and Australia), you can set a validation rule to map this time zone name to a unique time zone.

1.2.31 VDU Configuration

Advanced Outbound utilizes Dialogic VDU hardware to do predictive dialing. These are physical hardware cards which must be placed into a server running pages NT or 2000. They allow Advanced Outbound to do voice detection and classification of non-contact calls.

VDU cards must be configured into the database using the Advanced Outbound administrative interface before they can be used.

The following Dialogic VDUs are supported by Oracle Advanced Outbound:

- ❏ Basic Operation (no message support)
  - DTI/481SC, which is an ISA card and supplies 2 T1s (48 ports)
  - DTI/241SC, which is an ISA card and supplies 1 T1 (24 ports)
  - DTI/601SC, which is an ISA card and supplies 2 E1s (60 ports)
  - DTI /301SC, which is an ISA card and supplies 1 E1 (30 ports)
  - LSI/161SC, which is an ISA card and supplies 16 analog ports
- ❏ Enhanced Operation (messaging support)
  - D/480SC - 2T1, which is an ISA card and supplies 2 T1s (48 ports)

- D480JCT - 2T1, which is a PCI card and supplies 2 T1s (48 ports)
- D/240SC - T1, which is an ISA card and supplies 1 T1 (24 ports)
- D240PCI - T1, which is a PCI card and supplies 1 T1 (24 ports)
- D/600SC - 2E1, which is an ISA card and supplies 2 E1s (60 ports)
- D600JCT - 2E1, which is a PCI card and supplies 2 E1s (60 ports)
- D/300SC - E1, which is an ISA card and supplies 1 E1 (30 ports)
- D/300PCI - E1, which is a PCI card and supplies 1 E1 (30 ports)
- D/160SC - LS, which is an ISA card and supplies 16 analog ports
- D120JCT - LS, which is a PCI card and supplies 16 analog ports

1.2.32 Voice Messages

Advanced Outbound is able to play messages both for front hold (i.e. when an agent is not available) and when answering machines are detected. Messages must be recorded into a .wav or .vox file using an external utility (these programs come with all modern operating systems). They are then imported into the database using the Advanced Outbound administrative interface. Messages are associated to campaign schedules, and different messages can be specified for home and work telephone numbers.

2

Technology, Requirements, and Performance

2.1 Advanced Outbound Architectural Overview

This topic group provides information on the servers that comprise Advanced Outbound, its other components, how they are configured to work together, how they integrate with Oracle Marketing Online, the minimum software and hardware requirements, and sizing parameters for Advanced Outbound.

This topic group covers the following topics:

Advanced Outbound Physical Architecture

Advanced Outbound Servers

Oracle Marketing Online Integration

Minimum Software Requirements

Minimum Hardware Requirements

Sizing Parameters

2.1.1 Advanced Outbound Physical Architecture

The Advanced Outbound product consists of three main components:

1. **Schema -** Advanced Outbound has schema objects (primarily tables and views), PL/SQL packages, as well as Java stored procedures. The Advanced Outbound schema stores:

   - Cached records
   - Returned records

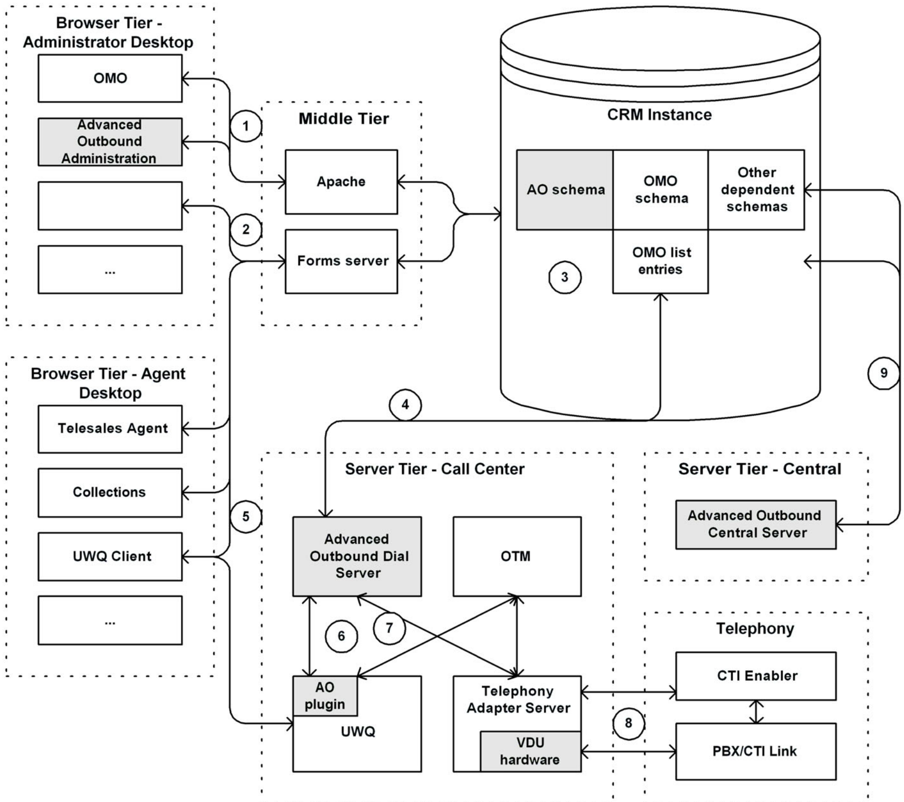
- Call history
- Recycling algorithms
- Record filters
- Runtime information on cache load
- Subset information
- VDU configuration data
- Voice messages

2. **Administration GUIs -** Advanced Outbound has a set of administration user interfaces to perform the following tasks:
   - Campaign schedule call center parameter setup
   - List call center parameter setup
   - Subset creation and maintenance
   - Record Filter creation and maintenance
   - Recycling creation and maintenance
   - VDU configuration
   - Voice messaging import and maintenance
   - Real time reporting
3. **Java servers -** Advanced Outbound has two Java server processes:
   - Advanced Outbound Central Server
   - Advanced Outbound Dial Server

   These servers are discussed in greater detail in the Advanced Outbound Servers topic.

2.1.1.1 Oracle Advanced Outbound Architecture Diagram

The following diagram shows the Advanced Outbound components in the context of a complete system. Components which are actually part of the Advanced Outbound product are highlighted in gray.



Numbered areas on the physical architecture diagram are explained below.

1. The Advanced Outbound administration GUI is on the HTML stack. It uses the 'Advanced Outbound Administrator' responsibility and it is part of the Oracle Advanced Outbound product.

2. To implement and administer other dependent components, other screens in both the HTML and Forms interfaces will be required. Examples of responsibilities used in Forms are 'Telesales Administrator' and 'CRM Administrator.'

3. Much of the Advanced Outbound functionality and integration happens through database schemas. There is an Oracle Advanced Outbound schema present in the CRM Instance and it is part of the Oracle Advanced Outbound product. Advanced Outbound is directly dependent on the schemas of the following:

- OMO (AMS) - Oracle Marketing Online
- TCA (HZ) - Trading Community Architecture
- JTA - Oracle Foundation
- JTT - Oracle Foundation
- IEO - Server schema and Logger

4. The Advanced Outbound Dial Server removes records from Oracle Marketing lists indirectly through the central cache and returns these records through the return queue. This process is described in more detail in the Advanced Outbound Dial Server topic.
5. The agent desktop applications, such as UWQ, Telesales, and Collections, are primarily Forms applications. All desktop applications integrate to Advanced Outbound through UWQ.
6. Advanced Outbound integrates into UWQ through the Media Provider interface. An AO plugin exists in UWQ and is considered part of the Oracle Advanced Outbound product.
7. The Advanced Outbound Dial Server uses the Telephony Adapter Server for both CTI and VDU control.
8. The Advanced Outbound Central Server is a lightweight server which does cache management, time zone and calendar management, and recycling. Notice from the diagram that the two Advanced Outbound servers do not communicate directly. The Advanced Outbound Central Server is part of the Oracle Advanced Outbound product.

2.1.2 Advanced Outbound Servers

This topic group discusses the responsibilities and architecture of the Advanced Outbound servers in greater detail, including:

The Advanced Outbound Central Server

The Advanced Outbound Dial Server

2.1.2.1 The Advanced Outbound Central Server

The Advanced Outbound Central Server is responsible for invoking the operations of Advanced Outbound that take place in the database. The Central Server does the following things:

- Populates Advanced Outbound's central cache from available lists.

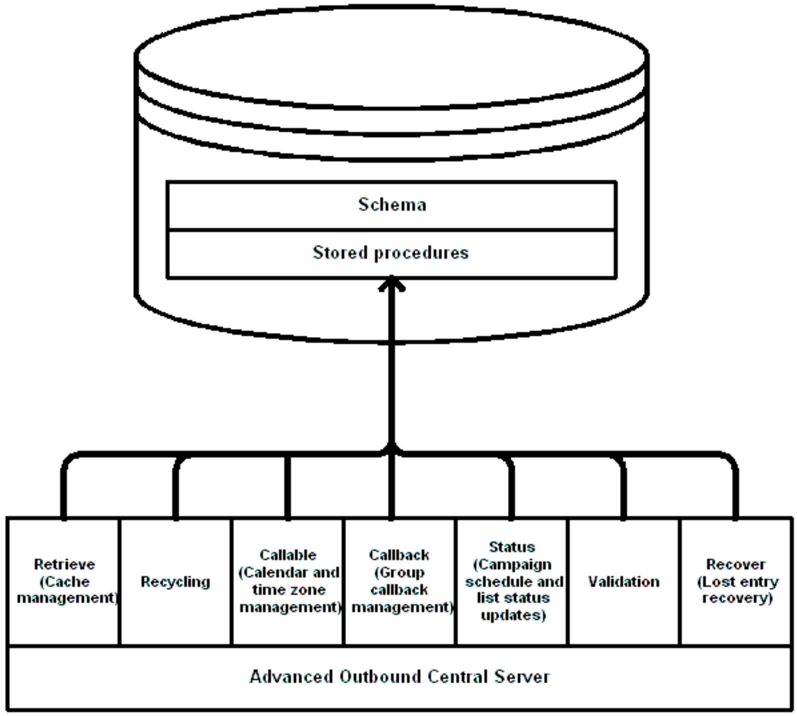
- Changes the status of campaign schedules and lists when necessary.
- Periodically calculates callable time matrices based on time zone, country code, list and campaign schedule information.
- Validates list entries.
- Executes recycling, which also populates call history and Interaction History when necessary.
- Cleans up the cache to find lost list entries (those taken by applications but never returned).
- Rolls up reporting data.

The Central Server has the following design characteristics:

- Because its functionality is implemented in the database, it is very lightweight.
- Its tasks are broken up into plugins. A basic understanding of this is helpful for understanding the Central Server's configuration.

The Central Server uses the Oracle Interaction Center Server Manager (ICSM) interface for configuration, for more information on ICSM please refer to the *Oracle Applications Interaction Center Implementation Guide*. A Central Server, as its name implies, exists once per instance. One Central Server performs all of the above tasks for all active campaign schedules and lists.

The following diagram depicts the Advanced Outbound Central Server, its responsibilities and it's relation to the database:



The above diagram depicts the CRM instance and the Oracle Advanced Outbound Central Server. The AO Central Server is responsible for invoking the following procedures or "tasks":

- Cache management
- Recycling
- Calendar and time zone management
- Group callback management
- Campaign schedule and list status updates
- Validation
- Reporting
- Lost entry recovery

These procedures or "tasks" are plugins and exist as stored procedures in the schema on the CRM instance.

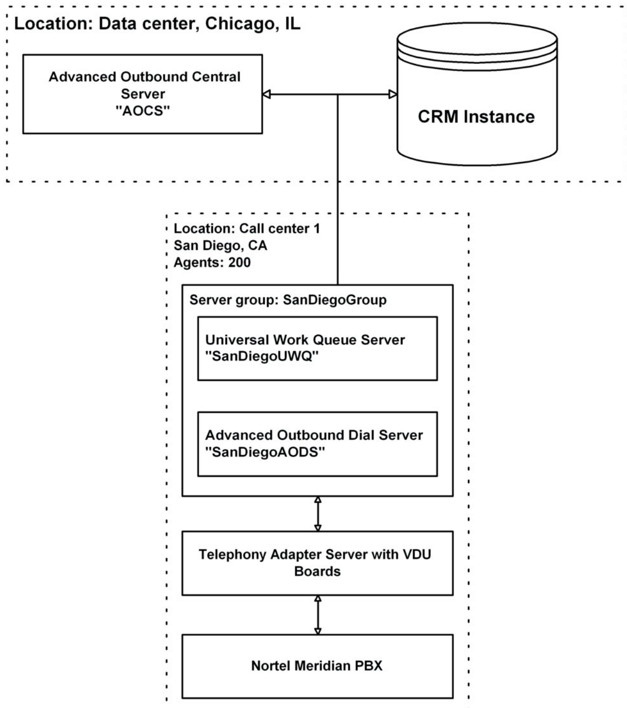
2.1.2.2 The Advanced Outbound Dial Server

The Advanced Outbound Dial Server is responsible for the following functional areas:

- Managing agent logins and agent state (via UWQ)
- Retrieving records from the central cache
- Delivering records through UWQ to desktop applications
- Placing progressive and predictive dials
- Predictive pacing
- Receiving record status data via UWQ from desktop applications
- Returning records to the database for processing by the recycling plugin

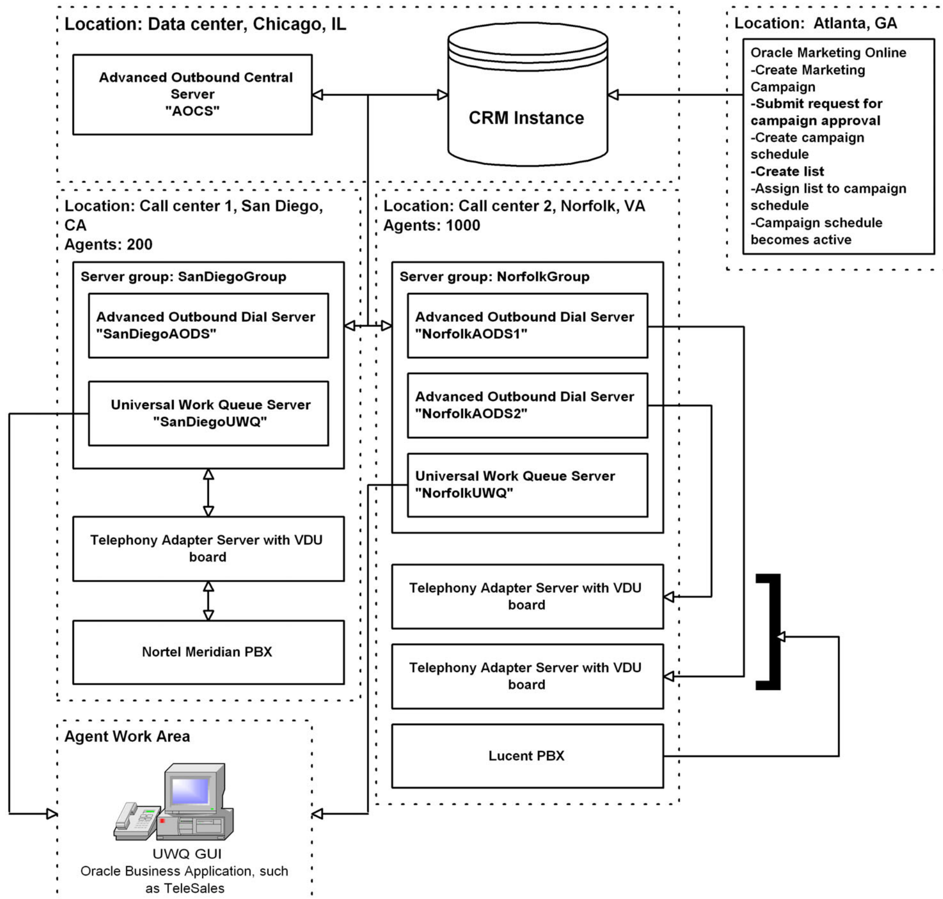
Unlike the Central Server, which resides alone in its own server group, Dial Servers belong to server groups in a similar manner to the other Interaction Center servers. For scalability purposes, multiple Dial Servers can be added to a single server group. Each Dial Server can support a large call center. When multiple Dial Servers are used, the Advanced Outbound UWQ Media Provider Plugin will automatically choose between them based on availability and load.

The following diagram provides a simple example layout of the Advanced Outbound servers, and illustrates the concept behind using server groups to set up distributed call centers:



The above diagram shows two interaction centers: one data center and one call center. The data center, which is located in Chicago, houses the CRM database instance and the Advanced Outbound Central Server. The call center, which is located in San Diego and has 200 agents, houses 1 instance of the Advanced Outbound Dial Server (SanDiegoAODS). In this example, the call center in San Diego uses a Nortel Meridian PBX.

The following diagram provides a complex example layout of the Advanced Outbound servers, and illustrates the concept behind using server groups to set up distributed call centers:



The above diagram shows three interaction centers: one data center, two call centers, an agent work area, and a marketing center. The data center, which is located in Chicago, houses the CRM database instance and the Advanced Outbound Central Server. Call Center 1, which is located in San Diego and has 200 agents, houses 1 instance of the Advanced Outbound Dial Server (SanDiegoAODS). Call center 2, which is located in Norfolk and has 1000 agents, utilizes 2 instances of the Advanced Outbound Dial Server (NorfolkAODS1 and NorfolkAODS2). In this example, call center 1 in San Diego uses a Nortel Meridian PBX and call center 2 in Norfolk uses a Lucent PBX. The agent work area utilizes the Oracle Universal Work Queue GUI and a business application, such as Oracle TeleSales.

The middleware setup, which defines the Telephony Adapter server and the CTI server, determines which Telephony Adapter server will be pointed to. When defining the Middleware via the Call Center HTML Admin, the flag 'Use Advanced Outbound' will indicate that there are VDU cards housed in the telephony adapter server for AO. All the VDUs housed in the SAME server node MUST point to the same Dial Server. The association to the Dial Server occurs at the VDU board definition level.

2.1.3 Oracle Marketing Online Integration

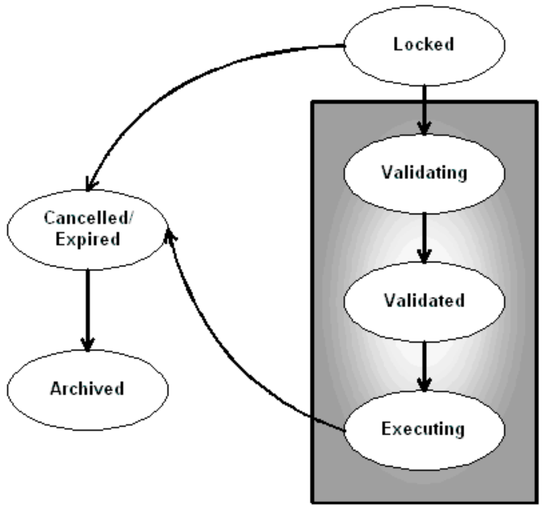
Advanced Outbound is tightly integrated with and dependent on Oracle Marketing Online (OMO). As such, OMO is a prerequisite for Advanced Outbound. Integration with Oracle Marketing Online deals primarily with sharing schema objects such as:

- lists
- campaign schedules
- list entries

2.1.3.1 List Integration

List integration with Marketing is based around a shared state model. In some states (or statuses), Marketing owns a list and its state transitions. In some states, Advanced Outbound owns the list and its state transitions.

The following diagram shows the state transition model for lists (the list states and transitions shown in shaded area are owned by Advanced Outbound):



The above diagram depicts the various list state transitions. Only the validating, validated, and executing list states are owned by Advanced Outbound.

The list state begins as "locked", where it can be cancelled/expired or begin the validating process. If it is cancelled/expired, it will be archived. If it begins the validating process, it will be validated, and begin the executing process (all within Advanced Outbound). Once the execution process has completed, it will be cancelled/expired, then be archived.

Definitions of these states, as well as the key transition states, are as follows:

- Locked (OMO). The list is manually placed into this state using the Oracle Marketing Online interface when no more changes will be made to it. Up to this point, it can be regenerated at will.
- Validating (OAO). Lists are periodically checked by Advanced Outbound, and placed into this state when:
  - They are associated with a campaign schedule of the proper state
  - They are locked

  At this point, they are validated, which is a relatively long-running process which checks each entry’s phone numbers, country codes, and time zone information.
- Validated (OAO). When a list finishes the validation process, its state is changed to validated.

- Executing (OAO). Advanced Outbound moves lists to the executing state when:
  - The current date is between the start date of the list's campaign schedule and its end date
  - The list's state is validated
  - The list's call center ready flag is set to Y
- Expired (OMO). Lists are moved to expired when the campaign schedule end date passes.

Records will only be released from lists which are in the **executing** state, and also have **active** schedules.

2.1.3.2 Campaign Schedules

Similar to lists, the sharing of campaign schedules is based around a state model. However, the campaign schedule integration is simpler.

The following conditions must be true for Advanced Outbound to use a campaign schedule from Oracle Marketing (and display it in the IEC Admin GUI):

- The activity is set to 'Telemarketing.'

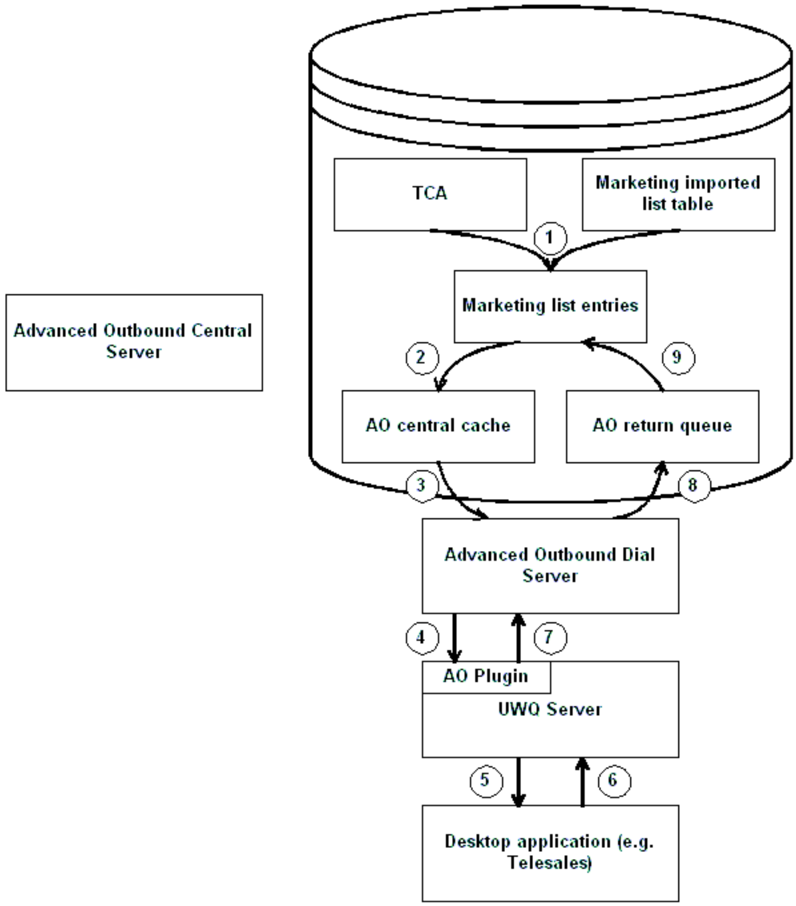
The following additional conditions must be true for Advanced Outbound to release records from lists within a campaign schedule:

- The campaign schedule's status code is active.

2.1.3.3 List Entries

A list entry is one row in a list. It is also called a record. The fields on each list entry are always the same within one list. The list source type determines what fields are present on each list entry. In Oracle Marketing Online, list source types have been consolidated down to B2C, or 'Consumers,' and B2B, or 'Organization contacts.'

Regardless of the data present, the following diagram shows one release and return cycle for a record:



The numbered steps in the diagram are explained below:

1. Each list entry is created during Oracle Marketing Online list generation. They will be created based on data that exists either in TCA or tables that Marketing Online uses to store imported records.
2. The Central Server populates the cache. The cache population process intentionally checks out more records than it will need to make sure that there is not a cache miss, which is very expensive. Any extra records are periodically recycled with the 'AO System' outcome code. The records selected:
   - Will be restricted according to callable time ranges for their time zone, country code, list, and campaign schedule

- Will be restricted and ordered by callback times, if applicable
- Will be ordered by list sort fields, if applicable
- Are done so according to list and subset conditions, which are evaluated here

3. When the Dial Server pulls records from the central cache, it does the following:
    - Executes release strategy, taking into account things like quantum and priority. Release strategy is executed across lists in the context of a campaign schedule, as well as across subsets in the context of a list.
    - Checks do not call data.
    - Executes the list's record filter, if present.
4. As agents request calls via Oracle Universal Work Queue (UWQ), the record data is delivered from the Dial Server to the Oracle Advanced Outbound (AO) plugin component. The AO plugin formats the record data in accordance with UWQ's generic media interface and sends an event to UWQ. If predictive or progressive dialing is being used, AO will subsequently send an event to UWQ reporting on the status of either the dial (progressive) or the transfer (predictive).
5. UWQ sends an event to the application with the record data. The application retrieves the necessary additional data and begins the call.
6. When the call is complete, the application returns the record and status data to UWQ.
7. UWQ sends the record, through the AO plugin, back to the Dial Server.
8. The Dial Server returns each record, along with outcome, result, and reason code information, into the return queue.
9. Records are checked back into the Marketing list.

2.2 Minimum Software Requirements

To successfully implement Oracle Advanced Outbound, the following software must be installed and configured prior to the implementation of Oracle Advanced Outbound:

Oracle software

- Oracle Applications release 11.5.6

  - The Oracle CRM system database must be installed and configured prior to the installation of Oracle Advanced Outbound. You must enter database information during installation and configuration steps. Oracle Advanced Outbound supports Oracle 8i database release 8.1.6 or later
  - CRM Foundation components, including Interaction History and Resource Manager.

    Note: Each of these products may have its own dependencies: Oracle Universal Work Queue requires Oracle Resource Manager and Oracle HRMS; Oracle Marketing Online requires Oracle Discoverer, and Oracle Workflow; etc.

    - The goal of Interaction History is to provide Oracle CRM applications with a common framework for capturing and accessing interaction information associated with every customer contact. IH is the central repository and provides a consistent API for tracking all automated or agent-based customer interactions. Oracle Interaction History is part or CRM Foundation and installed with Oracle Rapid Install 11*i*.
    - Resource Manager provides the capability for sales managers to easily add and update sales agent and partner profiles. It enables the managers to import sales group hierarchy from Oracle Human Resources on the vendor side, and to create and maintain agent and group profile for vendor or partner

- Oracle Marketing Online (OMO) 11.5.6
  - Oracle Marketing Online is a complete marketing automation software application designed to effectively plan, manage, execute, and ultimately analyze and optimize overlapping customer-focused programs to assist companies in winning and retaining profitable customers. Advanced Outbound interconnects with Oracle Marketing Online, which creates campaigns and lists to execute. You must purchase and implement Oracle Marketing Online separately from Advanced Outbound.
  - You also need Oracle Discoverer and Oracle Workflow for OMO
- Oracle TeleSales or Oracle Collections (business application)
  - Oracle Advanced Outbound 11i is supported by Oracle TeleSales and Oracle Collections as desktop applications and should be implemented at this time.

- Oracle Universal Work Queue (UWQ)
  - UWQ is required for both Oracle Advanced Outbound and Oracle TeleSales. UWQ provides a graphical user interface that serves as a work portal for the agent and delivers telephony metadata to the agent work area.
  - Oracle HRMS for UWQ
  - Oracle Resource Manager for UWQ
- Oracle Advanced Inbound
  - Oracle Telephony Manager (required)
  - Oracle Telephony Media Controller (optional)
  - Oracle Inbound Telephony Server (optional)
  - Oracle Routing Server (optional)
  - Server Monitor (optional)

Third Party Software

- Microsoft Windows NT 4.0, SP3 or Windows 2000
- Oracle approved internet browser
  - Netscape XXX
  - Microsoft Internet Explorer 5.5
- CTI Middleware
  - CT-Connect Client 5.2 (if using CT-Connect as the CTI middleware)
  - Cisco ICM (no client necessary for the Cisco ICM middleware)

2.3 Minimum Hardware Requirements

When implementing Oracle Advanced Outbound, you should consider the following when deciding on your minimum hardware requirements:

- Advanced Inbound and CRM disk space and memory requirement guidelines
- Advanced Outbound disk space and memory requirement guidelines
- The number of agents in the call center
- Call center volume

Memory requirements vary with the number of CRM applications being used on a particular instance, the number of users using each of the applications, and the estimated volume of customer interactions and application use.

General Hardware Requirements

You will need the following:

- ACD/PBX, outbound telephony lines (trunks)
  - The ACD/PBX must be installed and operational. It must also be configured by the vendor for computer telephony integration.
  - Trunks are dependent upon call volume, call center size, and so on. Each agent must have 1 channel to go out and 1 channel for the dialer. Oracle recommends a 1 to 1 trunk to agent ratio in cases of high voice rate (when we expect a high percentage of dials to result in a live voice). However, if the voice rate is low (say 30%) or when live agents are expected to leave answering machine messages, a higher dialer-to-agent ratio is acceptable. This ratio should not be 2 to 1.
- Telephony middleware server
  - The telephony middleware server acts as the translator between the ACD/PBX and the Oracle Telephony Manager (OTM) and the Advanced Outbound Dial Server. Two choices are available, Dialogic CT-Connect and Cisco ICM.
  - When Dialogic CT-Connect is used, the Advanced Outbound Dial Server connects through CT-Connect through the network. OTM uses the Telephony Adapter Server to reach CT-Connect. Both CT-Connect and ICM include server software that must be installed on an appropriate server machine. Consult respective Dialogic and Cisco documentation for details.
  - When Cisco ICM is used, the call center services use a Cisco-provided API to connect to the ICM server. No client is necessary on the Telephony Adapter Server box(es).
- Agent telephone set
  - The agent, supervisor, and manager telephone set must be installed and operational. Each telephone set must be able to accept incoming calls from the ACD/PBX.
- Call center server(s)

  - Oracle Advanced Outbound is dependent on several other Interaction Center Servers. These include:
    - Oracle Telephony Manager (OTM)
    - Universal Work Queue (UWQ)
- VDU boards, as necessary
  - The Advanced Outbound Dial Server utilizes Dialogic VDU hardware to do predictive dialing. These are physical hardware cards which must be placed into a server running Windows NT 4.0 or 2000. They allow Advanced Outbound to do voice detection and classification of non-contact calls. VDU cards must be configured into the database using the Advanced Outbound administrative interface before they can be used.
- Oracle Telephony Adapter Server
  - The Telephony Adapter Server component is crucially important to Advanced Outbound. There are, however, several additional AO-specific configuration steps to be done
  - The Advanced Outbound Dial Server uses the Telephony Adapter Server for both CTI and VDU control. Telephony Adapter Server supports VDU operations, and the VDU hardware on it is considered part of the Oracle Advanced Outbound product.

2.4 Sizing Parameters

The Advanced Outbound services can be run on any approved CRM platform. However if you are using VDU boards in your Oracle Telephony Adapter Server, then OTAS can be run only on Windows NT 4.0 or Windows 2000 servers.

Sizing parameters for the servers:

- The Advanced Outbound Dial Server is moderately memory intensive, however, it is heavily network intensive due to its communications with the UWQ agent and UWQ server, as well as the database. File system size is not a major factor.
- The Advanced Outbound Central Server is not memory or server intensive, however, it does rely heavily upon the database. Therefore, when you are considering an AO implementation, ensure that you have allocated enough disk space, memory, and have a large enough CPU to handle all of the requirements that AO will place on it in the future.

Factors that determine the hardware size:

- Number of concurrent agents
- Expected volume of calls
- Network throughput

The number of services (one service = one running instance of the software) and servers varies, based on the needs of an individual call center. There will only be one Advanced Outbound Central Server needed per CRM instance, but you may need multiple Advanced Outbound Dial Servers (depending on your business needs).

3

Dependency Requirements and Verification

This topic group provides information about the Oracle and non-Oracle products that are dependencies for Advanced Outbound.

3.1 Mandatory Dependencies

The dependencies for Oracle Advanced Outbound can be divided into two categories, including: Oracle products, and third party products.

Oracle Products

These products must be completely installed and configured prior to the installation and implementation of Oracle Advanced Outbound. For more information on installing these products, please refer to each product's individual Installation and Implementation Guides. Each of these products may have its own prerequisites, for example TeleSales and UWQ require Oracle Resource Manager and can integrate with Oracle HRMS.

Oracle Advanced Outbound depends on the following Customer Relationship Management (CRM) products:

- CRM Foundation, including Interaction History and Universal Work Queue (non media component)
- Oracle Marketing Online
    - Campaign, Schedule, List
    - Prepare Campaigns/Schedules for AO
- Oracle Universal Work Queue
    - Enables Media for AO

    - Associates AO with appropriate Media Action
- An Oracle business application (such as Oracle Telesales or Oracle Collections)
- Oracle Advanced Inbound (unless using manual dialing)
    - Oracle Telephony Manager
    - Telephony Media Controller (optional)
    - Inbound Telephony server (optional)
    - Routing server (optional)
    - Server Monitor (optional)
    - UWQ server

  Oracle Advanced Outbound integrates with Oracle Advanced Inbound in several ways:

    - The Advanced Outbound Dial Server must be added to the Interaction Center Server group which was created during the Advanced Inbound Implementation
    - The VDU boards which are used by the dialing server for Predictive dialing are housed on the Telephony Adapter Server.

Third Party Products

- Dialogic CT-Connect or Cisco ICM

  These are middleware products that provide a command interface between computers and telephony -- computer-telephony integration (CTI). They enable Oracle Advanced Outbound to issue dialing commands to the PBX and to route successful calls to the agent desktop.

- A web browser - Microsoft Internet Explorer (5.5 or above with Service Pack 2)
- An ACD or PBX switch approved for use with Oracle Advanced Outbound

Important: Compatibility between Oracle Advanced Outbound and third party products, including Computer-Telephony Integration middleware and switches, is certified after testing with each release of these Oracle products. Each combination of a switch, the switch vendor's own software release, and each CTI middleware release, must be certified independently. While Cisco ICM and Dialogic CT-Connect are the two middleware products currently supported by Oracle Advanced Outbound, there are limitations on the certified combinations of phone switches, switch software, and CTI middleware with each version of these Oracle products.

The certification information changes with some frequency, as third parties add and drop products and versions, and as Oracle's certification process proceeds. Therefore, current certification information is maintained on a web site, accessible to Oracle sales and product development personnel and to Oracle partners.

Customers should always have their Oracle sales channel verify, from the web site, that the combination of phone switch, switch vendor software and version, switch configuration, CTI middleware software and version are compatible and supported, prior to making an implementation plan.

4
Implementation Overview

This topic group includes the following topics:

Planning the implementation

Implementation Prerequisites

Process Description

4.1 Implementation Planning

There are two areas of consideration when planning an Oracle Advanced Outbound implementation. The first area includes collecting the information you need to implement the application. The second area involves system configuration planning (size, speed, number, etc.).

The planning process involves:

Collecting Information

Setup Planning

4.1.1 Collecting Information

Use the following list of questions to determine your implementation needs:

1. What type of Outbound Application will you be using? Oracle TeleSales? Oracle Collections?
2. What dialing strategy will you be using? Manual? Progressive? Predictive?

   Depending on your dialing method, you may need to confirm the best way to handle the processing of the list. How many agents will be handling the campaign schedule? If there are a few, you might want to run a progressive campaign, due to the complex algorithms that predictive dialing needs to run.

3. What is your PBX Name? PBX type? PBX server?
4. What Computer Telephony Integration will you be using? (Server, type, configuration, etc.).
5. What is your VDU type? VDU port name and extension assignments?
6. What are your agent extension numbers?
7. What will your outbound call volume be (calls/hr., average, low and peak usage)?
8. Do you have any special calling requirements and restrictions (restrictions on number of calls, call time, etc.)?
9. What will you be using for your test agent information?
10. What will you be using for your test data?
11. What validation information will you be using?
    - Area Code/Time Zone Mapping Data
12. How do you want to handle call outcome and recycle handling information?
    - Do you want to emphasize initial call attempts or emphasize persistent callbacks?
    - How do you want to handle wrong numbers and other special cases?

      For every campaign schedule, you need to create recycling strategies that best correspond with the needs of the business. How do you plan to handle a record that is returned after it has been dialed for a non-connect? Do you really need to reach the client, or can the call wait a day. How do you plan to handle Special Information Tones (SIT)?
    - Drop records after sale or contact
    - Callback
    - Busy call handling
    - No answer call handling
    - Answer machine handling
    - Other call outcomes
    - Limits on call attempts

13. What Dialing Access Information will you need?
    - T1, E1 line control mode (Onhook/Offhook)
    - External line access (dial 9)
    - Local calls (same area code, different area code)
    - Long distance access code (same area code, different area code)
    - International access code
    - Area code information
    - Special dialing information for PBX (always dial all digits, etc.)
14. What are the sources of records to be dialed?
    - Existing customer data?
    - Imported prospect data?
    - Legacy systems?

Note: While there may be one or many original sources of business data, in Advanced Outbound 11i, all data come from Oracle Marketing Online and is thereby part of the Oracle TCA customer model.

4.1.2 Setup Planning

Setup planning involves matching your business requirements to the software and hardware components necessary to best satisfy those requirements. The list of questions in this topic will aid you in determining your hardware requirements, and the sizing parameters for the Advanced Outbound servers.

General Questions

Use the following list of questions to help determine your system configuration:

1. What type of switch will you be using?
2. What type of telephone sets will your agents be using?
3. What type of VDU boards will you be using? T1? E1?
4. What middleware will you be using?
5. What are the extension numbers for the dialers?

6. What are your agent extension numbers?

Important: Compatibility between Oracle Advanced Outbound and third party products, including Computer-Telephony Integration middleware and switches, is certified after testing with each release of these Oracle products. Each combination of a switch, the switch vendor's own software release, and each CTI middleware release, must be certified independently. While Cisco ICM and Dialogic CT-Connect are the two middleware products currently supported by Oracle Advanced Outbound, there are limitations on the certified combinations of phone switches, switch software, and CTI middleware with each version of these Oracle products.

The certification information changes with some frequency, as third parties add and drop products and versions, and as Oracle's certification process proceeds. Therefore, current certification information is maintained on a web site, accessible to Oracle sales and product development personnel and to Oracle partners.

Customers should always have their Oracle sales channel verify, from the web site, that the combination of phone switch, switch vendor software and version, switch configuration, CTI middleware software and version are compatible and supported, prior to making an implementation plan.

System Sizing Questions

Use the following list of questions to help determine your sizing needs:

1. How big will your call center be? How many agents will you have?
2. What call volume are you expecting in your call center?
3. Will your call center be single site or multi site?

Sizing Parameters for the Dial Server

The Advanced Outbound Dial Server is moderately memory intensive, however, it is heavily network intensive due to its communications with the UWQ agent and UWQ server, as well as the database.

The following table provides sizing recommendations for the Advanced Outbound Dial Server:

# Agents	Minimum Memory	Maximum Memory	Thread Count
1 - 100	128 Megs	256 Megs	300
101 - 250	256 Megs	512 Megs	500
251 - 500	512 Megs	1024 Megs	1000

The number of trunks is dependent upon call volume, call center size, and so on. Each agent must have 1 channel to go out and 1 channel for the dialer. Oracle recommends a 1 to 1 trunk to agent ratio in cases of high voice rate (when we expect a high percentage of dials to result in a live voice). However, if the voice rate is low (say 30%) or when live agents are expected to leave answering machine messages, a higher dialer-to-agent ratio is acceptable. This ratio should not be 2 to 1.

1. How many dial servers will you need?
2. To what server group will each dial server belong?
3. How do you want to set up your PBX, VDU, and Agent distributions?
4. What dialing scripts will you use?

Sizing parameters for the Central Server

The Advanced Outbound Central Server is not memory or server intensive, however, it does rely heavily upon the database. Therefore, when you are considering an AO implementation, ensure that you have allocated enough disk space, memory, and have a large enough CPU to handle all of the requirements that AO will place on it in the future.

Most of the Central Server's operation consists of scheduling the execution of PL/SQL on the database. However, it requires 20 or so database connections (problems will arise if the database connection (dbc) file has a low value for the number of connections (NUM_CONNECTIONS).

The amount of disk space is largely determined by the level of logging you want to utilize. Logging levels can be set from 0 to 4.

- Oracle recommends that you use Output Level 1 in normal operations for moderate logging without slowing performance or taking up large amounts of disk space.
- Level 0 returns no logging, but results in the fastest performance and takes up very little disk space.

- Level 4 returns the most detailed logging, such as for troubleshooting, but results in slower performance and requires a large amount of disk space.

1. What calling calendars will you need?
2. What validation rules do you want to use?
3. What recycle rules do you want to use?
4. How do you want to handle callbacks, recovery, reporting?
5. What number of calls per month do you anticipate?
6. What is the maximum number of simultaneous outbound campaigns you want to execute?

System and User Information Questions

Use the following list of questions to help determine the information about your server groups, system, and users:

1. What is the name of the server group you created when setting up Advanced Inbound?

   Server groups are established by Interaction Center Server Manager (ICSM) as a conceptual means of associating various call center services with each other. Both the Advanced Outbound Dial Server and Advanced Outbound Central Server must be defined as part of a server group in order for ICSM to be able to communicate with AO. The Advanced Outbound Central Server must exist only once per instance. The number of Dial Servers depends on the size and volume of your interaction center.

   Only servers within the same server group can communicate with each other. Each server can be a member of one and only one server group. Every call center agent is also associated with one and only one server group. This allows the agent to connect to the services provided by the servers from that server group.

   You should link the Advanced Outbound Dial Server into the Server Group you created when setting up Oracle Advanced Inbound. Oracle Telephony Manager (OTM), a component of Oracle Advanced Inbound, must reside in the same server group as each Dial Server so that the teleset number of the agent's physical phone can be mapped to the teleset extension in OTM.

2. Have you gathered all of the necessary user information for every user of Advanced Outbound?

   This information should include:

- Employee type
- Employee name
- User ID
- Password
- Campaigns to which they will be assigned

3. Assign the correct responsibilities to the Advanced Outbound administrator user(s):
   - **Oracle Marketing Super User** - allows user to manage Oracle Marketing Operations.
   - **Advanced Outbound Administrator** - allows user to manage Advanced Outbound Operations.
   - **Call Center HTML Administration** - allows user to manage Call Center ICSM.

4.2 Implementation Prerequisites

Before you can implement Oracle Advanced Outbound, you must ensure the following tasks have been performed:

1. Complete an administrative-tier installation of Oracle Applications.
2. Complete a web-tier installation of Oracle Applications on each machine identified.
3. Run Rapid Install.

   Rapid Install installs the Oracle8i Enterprise Edition technology stack and the Oracle Applications file system. Rapid Install installs the following:
   - Oracle8i Enterprise Edition (8.1.6) with interMedia Text and Spatial
   - Oracle Forms Server, Oracle Reports Server, Oracle Graphics, and WebDB listener
   - Application servers WebDB and Apache, with JServ (Web tier)
   - JRE (Java run-time environment)
   - Selected Oracle applications
     - Oracle CRM Foundation, including Resource Manager and Interaction History

  - Oracle Marketing Online (OMO)
  - Desktop Application such as Oracle TeleSales or Oracle Collections
  - Oracle ICSM (including all Advanced Inbound and Advanced Outbound servers)
- JInitiator
  - When you access certain parts of the system (for example, those based on Forms or Discoverer), you need JInitiator to supply the Java virtual machine. The latest version of JInitiator that was available at the time of the product release is on the Oracle Applications Rapid Install Server Technology CD, which can be found in the `\util\jinitiator` directory in the `Common` directory of your file system.
  - Implemented as a plug-in (Netscape Communicator) or ActiveX component (Microsoft Internet Explorer), Oracle JInitiator allows you to specify the use of the Oracle Java Virtual Machine (JVM) on Web clients instead of having to use the default JVM of the browser.
  - When it is needed, the browser attempts to load Oracle JInitiator. If Oracle JInitiator has not been previously installed, the browser downloads the necessary installation executable to the PC. Once installed, Oracle JInitiator runs the Oracle Forms Java applet and starts an Oracle Applications session.

4. Install an ACD or PBX switch and approved CTI middleware.
   - CTI middleware - CT Connect or Cisco ICM
5. Implement Oracle Marketing Online.

   Prerequisites for the OMO implementation include:

   - General Ledger (GL)
   - Human Resources (HRMS).
   - Oracle Discoverer
   - Oracle Workflow

   Particular attention should be paid to the creation of marketing mediums as well. Marketing mediums are used in the integration with Advanced Outbound to determine which user receives the approval workflow for a given campaign schedule.

To be compatible with Oracle Advanced Outbound, use the following Marketing source view types:

- B to B - Business to Business (Organization Contacts)
- B to C - Business to Consumer (Persons)

Caution: While Oracle Marketing Online allows you to modify the source type fields, you MUST NOT remove or modify the following fields:

Per Customer - Oracle Advanced Outbound requires these fields for each customer. They are either used in the screen pop, or to check for DNC, release control, or the stop list.

- PERSON_FIRST_NAME
- PERSON_LAST_NAME
- PERSON_NAME_SUFFIX
- PERSON_TITLE
- PIN_CODE
- PARTY_NAME
- PARTY_ID
- SOURCE_CODE
- SOURCE_CODE_FOR_ID
- PARTY_SITE_ID
- POSTAL_CODE

Per Phone Number - Oracle Advanced Outbound requires these fields for each phone number.

- CONTACT_POINT_ID
- TIME_ZONE
- PHONE_COUNTRY_CODE
- PHONE_AREA_CODE
- PHONE_NUMBER
- RAW_PHONE_NUMBER
- REASON_CODE

---

6. Install and implement Oracle Advanced Inbound.
7. Implement Oracle Universal Work Queue.

Implementation of UWQ should include the following steps:

- Creation of server group(s), most likely one per call center.
- Creation of UWQ classifications for the business applications implemented above.

Note: IUWQ must be Media enabled to work with Advanced Outbound.

Use the Call Center HTML Administrator responsibility to associate the appropriate form with Advanced Outbound (under the UWQ Media Association tab).

Set the following system profile settings for AO to "Yes":

- IEU: Media: Telephony
- IEU: Queue Order: Advanced Outbound Telephony
- IEU: Queue: Advanced Outbound Telephony

---

8. Implement the business applications (Oracle TeleSales or Oracle Collections).

   The business application(s) should be implemented at this point.

4.3 Process Description

Once you have completed the tasks outlined in the Implementation Prerequisites topic, you can begin implementing Oracle Advanced Outbound.

This topic group provides high level implementation tasks necessary to implement Oracle Advanced Outbound.

1. Creating and Administering Advanced Outbound Users
2. Splicing Advanced Outbound Into Your Database
3. Installing and Configuring the CTI Middleware
4. Configuring Table Spaces in Your Database
5. Implementing the Advanced Outbound Servers
6. Installing the VDU Boards and Dialogic Software
7. Setting Up Interaction History

8. Setting Up Marketing Online
9. Configuring Advanced Outbound
10. Configuring Universal Work Queue

5

Implementation Tasks

This topic group provides detailed steps to perform all of the necessary tasks to implement Oracle Advanced Outbound, including:

Creating and Administering Advanced Outbound Users

Splicing Advanced Outbound Into Your Database

Installing and Configuring the CTI Middleware

Configuring Table Spaces in Your Database

Implementing the Advanced Outbound Servers

Installing the VDU Boards and Dialogic Software

Setting Up Interaction History

Setting Up Marketing Online

Configuring Advanced Outbound

Configuring Universal Work Queue

5.1 Creating and Configuring Advanced Outbound Users

Users Overview

Prior to creating and administering users for Oracle Advanced Outbound, you must understand the types of users required.

From an Oracle Applications perspective, you must define users that can log into an Oracle Applications session, and assign each user with the appropriate responsibility or responsibilities to perform a particular set of functions.

At minimum, for each implementation, you will need to define three types of users:

- An administrator user
- An interaction center agent user (typically an employee in the enterprise)
- The IECAOUSER

Administrator User

An administrator must have access to functions that the typical interaction center agent will not, and administers users and applications across the broad spectrum. For example, one function of an administrator is to create agent users. This necessitates the creation of an administrative user as the first step.

To successfully implement Oracle Advanced Outbound you must create at least one administrator user. If you do not want one user account to have access to multiple Oracle applications, you can create several administrator users and assign each the appropriate responsibility. To create your administrator user, you should use the seeded (usually "sysadmin") login to access the Self-Service Login URL, which is also referred to as the Forms Login.

The administrator user does not need to be an employee in the database. However, if the administrator user is an enterprise superuser that will perform work in CRM applications as well as administrative tasks with the same login, then the administrator user must also be created as an employee in the database.

For Advanced Outbound implementation, you will need to create an administrator user with all the following responsibilities (or separate administrator users for each of the following responsibilities):

- **System Administrator**
  - Create and administer Oracle Applications users
  - Set and modify system profile options
  - Assigning or changing roles
- **HRMS Manager**
  - Create employees in the enterprise database (if Oracle HRMS is installed)
- **CRM Resource Manager**
  - Create employees in the enterprise database (if Oracle HRMS is NOT installed)
  - Import employees from the enterprise database as CRM resources
- **Call Center HTML Administration**

- Manage multiple aspects of interaction center, including: ICSM, and UWQ Media Actions
- **Oracle Marketing Super User**
  - Manage Oracle Marketing operations
- **Advanced Outbound Administrator**
  - Manage Oracle Advanced Outbound operations
- **Advanced Outbound Concurrent Requests**
  - Configure and run concurrent processes to update queue count
- **Advanced Outbound Performance Monitor**
  - Monitor Call Center Performance
- **Interaction History**
  - Create outcome, result, and reason codes
- **Oracle Marketing Administration**
  - Create custom target group priority levels

As well, the administrator user must belong to a valid sales group to access certain tabs within the Oracle Marketing Online Application. The specifics of creating this group will be discussed in the Creating a Sales Group Topic.

Agent User

Agent users will typically have access to at least one Oracle business application, and many enterprises will require these users to be members of the enterprise database.

The Agent user must be assigned one or both of the following responsibilities:

- **TeleSales Agent**
  - Allows agent level access to Oracle TeleSales.
- **Collections Agent**
  - Allows agent level access to Oracle Collections

The agent user can be assigned to a resource group to eliminate the need to assign campaign schedules to agents on an agent-by-agent basis. Instead, you can assign the appropriate agents to a resource group, then assign a campaign schedule to the entire group. The specifics of creating a resource group are discussed in the Creating a Resource Group topic.

As well, there are specific agent user profile options that must be set before the agent can use either of the business applications. The configuration of these profile options is discussed in the Setting User Profile Options for Outbound Telephony topic.

IECAOUSER

For Advanced Outbound to be able to successfully log to Oracle Interaction History (IH) predictively dialed calls that do not result in a live connect, a user must be created and assigned the user name IECAOUSER. This user must also be created as an employee in your enterprise database, linked to the user, and imported as a CRM Resource. If the IECAOUSER is not created properly as an employee, user, and CRM Resource; a resource ID of 0 will be logged to Oracle Interaction History whenever a predictively dialed call does not result in a live connect. Interaction History will reject this resource ID, thus reporting information in Oracle Interaction History will not exist.

- When creating this user as an employee in the database with Oracle HRMS (or CRM Resource Manager if Oracle HRMS is not installed), assign a first name of IECAO and a last name of USER.
- When creating the user by logging into the Self Service Login URL with the System Administrator responsibility, assign the user name of IECAOUSER and link the user to the employee with a first name of IECAO and a last name of USER.
- When importing the CRM Resource, ensure the user name is IECAOUSER.

There are five specific tasks associated with creating and administering users for Oracle Advanced Outbound:

- Create employees in the enterprise database.
- Create Oracle Applications user accounts and associate these user accounts with employees in the enterprise database.
- Create groups and assign users to these groups
- Create (import) employees as a CRM resource.
- Set User Profile Options for Outbound Telephony

5.1.1 Creating an Employee in the Enterprise Database

Enterprises using Oracle Human Resources Management Systems (HRMS) must create employees with this application. For enterprises not using HRMS as their human resources application, employees must be created using CRM Resource Manager.

Use this procedure to create an employee in Oracle Human Resource Management

Login

Self Service Login URL

Responsibility

<country> HRMS Manager (for example US HRMS Manager if in the United States)

Steps

1. Click **People > Enter and Maintain**.

   The Find Person window appears.

2. Click **New**.

   The People window appears.

3. Enter the information for the new person.

   The following fields are required:

   - Last (Name)
   - Gender
   - Type (select **Employee**)
   - Date of Birth
   - Social Security Number (if using US HRMS)
   - Employee (Number) - If the Employee field is inactive, then Oracle HRMS is set up to automatically generate the employee number when the record is saved.

   Other fields may be required depending on how your enterprise has set up Oracle HRMS. In addition, when you save the record, you may receive one or more messages that explain the consequences of leaving certain fields blank.

4. From the File menu, click **Save**.

You may close the People window.

Note: If the Employee field is inactive, then Oracle HRMS is set up to automatically generate the employee number when the record is saved.

5.1.2 Creating a User and Linking the User to the Employee

The process of creating Oracle Applications users includes the following tasks:

- Creating a user name - This user name will be used to log in to Oracle Applications (either the Self Service Login URL or the HTML Login URL).
- Linking the user to the employee created in the Creating an Employee in the Enterprise Database topic.
- Setting a password for the user - A password is required in addition to a user name when logging in to Oracle Applications. The password you set in this procedure must be changed the first time you log in as the user you create.
- Assigning responsibilities to the user - The ability to perform tasks in the forms application depends on the responsibility you select. A responsibility is a level of authority in Oracle Applications that lets you access only those Oracle Applications functions and data appropriate to fulfill your role in an organization. In essence, a responsibility is a map that identifies a resource (user) and provides that resource with an association to specified functionality.

  Each responsibility allows access to:

  - A specific Oracle application or group of Oracle applications.
  - A set of books, such as U.S. Operations or German Sales or an organization, such as New York Manufacturing or New York Distribution.
  - A restricted list of windows to which you can navigate.
  - A restricted list of functions you can perform. For example, two responsibilities may have access to the same window, but one responsibility's window may have additional function buttons that the other responsibility's window does not have.
  - Reports in a specific application; your system administrator can assign groups of reports to one or more responsibilities, so the responsibility you choose determines the reports you can submit.

Each user has at least one responsibility and several users can share the same responsibility.

Administrator Responsibility Matrix

Responsibility	Function
Advanced Outbound Administrator	Manage Oracle Advanced Outbound operations
Oracle Marketing Super User	Manage Oracle Marketing operations
Call Center HTML Administration	Manage multiple aspects of interaction center, including: ICSM, and UWQ Media Actions.
Advanced Outbound Concurrent Requests	Configure and run concurrent processes to update queue count
Advanced Outbound Performance Monitor	Monitor Call Center Performance
Interaction History	Create outcome, result, and reason codes
Oracle Marketing Administration	Create custom target group priority levels

Agent Responsibility Matrix

Responsibility	Function
TeleSales Agent	Permits agent level access to Oracle TeleSales
Collections Agent	Permits agent level access to Oracle Collections

Login

Self-Service Login URL (Forms)

Responsibility

System Administrator

Steps

1. Click **Security > User > Define**.
2. In the User Name field, type the name of the user.
3. Click in the Person field.

The Person Names dialog box appears.

4. In the Find field, type the name of the employee you created in the Creating an Employee in the Enterprise Database topic and click **Find**.

   The search results appear in the field below the Find field. Since wildcard (%) searches are allowed, you may receive a long list of names depending on what you typed in the Find field.

5. Click the employee name you want from the results list.

   The Person field populates with the selected employee name.

6. In the Password field, type a password for the user account and then press **Tab**.

   This password is temporary. When you sign on as this user for the first time, the message “Your password has expired” appears and you are prompted to set a new password.

7. Type the password again to verify it.

8. In the Responsibilities tab, add the following responsibilities, as appropriate.

   - System Administrator
   - <country> HRMS Manager (for example: US HRMS Manager)
   - CRM Resource Manager
   - Advanced Outbound Administrator
   - Oracle Marketing Super User
   - Call Center HTML Administrator

9. From the File menu, select **Save**.

5.1.3 Creating a Sales Group

To access the tabs in Oracle Marketing Online, the administrator user to whom you want to grant OMO access must belong to a valid sales group. This sales group must be assigned the **Sales Manager** sales role and a usage of **Sales and TeleSales**.

Use this procedure to create a sales group.

Login

Self-Service Login URL (Forms)

Responsibility

CRM Resource Manager

Steps

1. From the Navigator window, click **Maintain Resources > Groups**.

   The Define Groups window appears.
2. In the Name field, type a name for the sales group you are creating.
3. On the Define Groups window, click the **Roles** tab.
4. From the list in the Role Type field, select **Sales**.
5. From the list in the Role field, select **Sales Manager**.
6. Click the **Usages** tab.
7. From the list in the Usage field, select **Sales and TeleSales**.
8. Click the **Save** icon.

5.1.4 Creating a Resource Group

Use this procedure to set up resource groups. Resource groups allow the assignment of multiple agents to a campaign schedule without having to assign each agent individually.

You can have multiple employees in one group. An employee in a group with the role of manager automatically becomes the manager of the other employees in that group and of the employees in the groups below in the hierarchy.

Note: You must not assign more than one employee with the role of Manager per group. Doing so will impact the reporting accuracy.

Use this procedure to create a resource group.

Login

Self-Service Login URL (Forms)

Responsibility

CRM Resource Manager

Steps

1. Click **Maintain Resources > Groups**.

   The Define Groups page appears.

2. In the Group Name field, type a name for your resource group.
3. Click the **Roles** tab.
4. From the list in the Role Type field, select **TeleSales** and **Collections** if this is a resource group for Oracle Collections agents, or select **TeleSales** if this is a resource group for Oracle TeleSales agents.
5. From the list in the Role Type field, select **TeleSales Agent** and **Collections Agent** for use with Oracle Collections, or select **TeleSales Agent** for use with Oracle TeleSales.
6. Click the **Usages** tab.
7. From the list in the Usage field, select **Sales and TeleSales** and **Collections** if this is a resource group for Oracle Collections agents, or select **Sales and TeleSales** if this is a resource group for Oracle TeleSales agents.
8. Click the **Save** icon.

5.1.5 Importing a CRM Resource

Use the following procedure to import a CRM resource.

Login

Self-Service Login URL (Forms)

Responsibility

CRM Resource Manager

Steps

1. Click **Maintain Resources > Import Resources**.

   The Selection Criteria window appears.

2. In the Resource Category field, select **Employee**.
3. Enter any additional selection criteria.

   For example, in the Name field, select the name of an employee.

4. Click **Search**.

   Employees that meet the search criteria are listed in the Search Results area. The Select checkboxes for the matching employees are automatically selected.

5. Clear the Select checkboxes of the employees for whom you do not want to create a CRM resource.

6. Click **Create Resource**.

   The Default Values window appears.

   > **Important:** Do not make any changes or add roles from this window. You can add or modify this information in the resource details later.

7. Click **OK** to accept the defaults.

   The Selected Resources window appears. The Comments field indicates whether the resource is a new record, a duplicate record, or a duplicate record with a new role definition. The Select checkboxes are automatically selected.

8. Clear the Select checkboxes of the employees that you do not want to save as a resource.

9. To save the resources, click **Save Resource**.

   A transaction number appears in the Transaction Number field. The transaction number is associated with each resource created during this transaction. More than one resource can have the same transaction number.

10. Click **Details**.

    The Resource window appears. Verify the name of the resource (Name), the name of the employee (Source Name), and the user name (User Name) and note the resource number (Number).

11. From the Resource window, click the Roles tab (if it is not already displayed).

12. In the Role Type field, select **Sales** from the list of values.

13. In the Role field, select **Sales Manager** from the list of values.

14. Click the **Save** icon.

15. From the Resource window, click the Groups tab.

16. In the Name field under Groups, select the group name you created in the Creating a Group topic.
17. Click in the Name field under Group Member Roles, and the field auto-populates with the Sales Manager role.
18. Click the **Save** icon.

5.1.6 Setting User Profile Options for Advanced Outbound Telephony

Profile options, in combination with the role and group to which each agent user is assigned, determine what information that user can view and modify.

This step only needs to be performed for agent users who will be logging in to Oracle E-Business applications, such as Oracle TeleSales and Oracle Collections.

Use the following procedure to set user profile options for outbound telephony.

Login

Self-Service Login URL (Forms)

Responsibility

System Administrator

Steps

1. Click **Profile > System**.
2. Specify the level or levels at which you wish to view or set profile option values.

   Typically, interaction center profile options are set for the Oracle Applications instance (for the purpose of profile options, this is also called the site). Then, if necessary, the profile options are modified for a user or a set of users working under a responsibility.

   - If you want to view or set profile options for all users at the installation site, select the Site box.
   - If you want to view or set profile options for users working under responsibilities owned by a specific application, select the Application box and then select an application from the Application list.

- If you want to view or set profile options for users working under a specific responsibility, select the Responsibility box and then select a responsibility from the Responsibility list.
- If you want to view or set profile options for a specific user, select the User box and then select a username from the User list.

3. If you want to display profile options that include a specific character string, type the characters in the Profile field.

   You may search for profile options using character strings and the wildcard symbol (%). For example, to find profile options prefixed by "IEU", the product code for Oracle Universal Work Queue, enter IEU%.

4. Click **Find**.

   The System Profile Values window appears, displaying all of the profile options beginning with the character string you typed in the Profile field.

5. Set the values for the profile options at one or more levels.

   To use Oracle TeleSales as the business application, the following user profile options will need to be set to "Yes" if you want the user to have access to each of these queues:

   – IEU: QUEUE: Advanced Outbound Telephony - allows user to log into the Advanced Outbound queue.
   – IEU: QUEUE: Forecasts - allows user to view the Forecasts queue.
   – IEU: QUEUE: Inbound Telephony - allows user to log into the Inbound queue to receive calls.
   – IEU: QUEUE: Leads - allows users to view the Leads queue.
   – IEU: QUEUE: Opportunities - allows users to view the Opportunities queue.
   – IEU: QUEUE: Tasks - allows users to view the Tasks queue.

   To use Oracle Collections as the business application, the following user profile options will need to be set to "Yes" if you want the user to have access to each of these queues:

   – IEU: Queue: Delinquencies
   – IEU: Queue: Dunning
   – IEU: Queue: Promises

   – IEU: Queue: Quotes

6. When a profile option may be set at more than one level, the value entered at the Site level has the lowest priority. The value entered at the Site level is superseded by any value entered at the Application level value and the value entered at the Application level is superseded by any value entered at the Responsibility level. The value entered at the User level has the highest priority and overrides values entered at any other level.

7. From the File menu, click **Save**.

   Your changes take effect as soon as the user signs on or changes responsibility. You may close the System Profile Values window.

5.2 Splicing Advanced Outbound Into Your Database

If this is the first time you have applied IEC patches on this site, you should run ADSPLICE to apply the patch that contains the IEC product definitions in the database. ADSPLICE only needs to be run once for each set of products. If IEC product information is already defined in this site, you do not need to perform this task. If you are upgrading from an earlier version (that does not use the code IEC), you will still need to run ADSPLICE.

Use the steps below to splice Advanced Outbound into your database:

Login

Not applicable

Responsibility

Not applicable

Steps

1. Copy the following text files from 1932843/iec/admin to the admin directory under your APPL_TOP.

   - iecprod.txt
   - iecterr.txt
   - newprods.txt

2. Change directories to the admin directory under your APPL_TOP.

3. Edit newprods.txt to reflect the tablespaces that the IEC user and schema should use.

4. Run adsplice from the admin directory under your APPL_TOP. When you are asked to enter the name of your AD Splicer control file, type **newprods.txt**.

   AD Splicer will regenerate the environment file (e.g. APPLSYS.env under APPL_TOP) or registry. If you have made manual modifications to your environment file or your registry, you will need to apply those changes again. IEC_TOP must be defined. You can confirm this by using the echo command to display IEC_TOP.

5. From this new environment, use the AutoPatch utility to apply the patch driver (c1932843.drv).

   This is the copy driver.

5.3 Installing and Configuring the CTI Middleware

Installing the CTI Middleware

Installing the CT-Connect Client

Configuring the CTI Middleware

5.3.1 Installing the CTI Middleware

Oracle Advanced Outbound supports two middleware products:

- Intel CT-Connect or
- Cisco ICM (Intelligent Call Manager)

The middleware configuration tells the Advanced Outbound Dial Server where the telephony adapter server is located and which Computer Telephony Integration (CTI) Server to use. The middleware also defines other telephony parameters used by the Dial Server (and Oracle Telephony Manager).

In most instances there will only be one CTI Server and one telephony adapter server in an interaction center environment, therefore only one middleware instance needs to be configured. However in a large interaction center, multiple telephony adapter servers are necessary for load balancing. Since it is not recommended to run multiple telephony adapter servers on the same machine, you will need a separate middleware configuration for each telephony adapter server.

Important: Compatibility between Oracle Advanced Outbound and third party products, including Computer-Telephony Integration middleware and switches, is certified after testing with each release of these Oracle products. Each combination of a switch, the switch vendor's own software release, and each CTI middleware release, must be certified independently. While Cisco ICM and Dialogic CT-Connect are the two middleware products currently supported by Oracle Advanced Outbound, there are limitations on the certified combinations of phone switches, switch software, and CTI middleware with each version of these Oracle products.

The certification information changes with some frequency, as third parties add and drop products and versions, and as Oracle's certification process proceeds. Therefore, current certification information is maintained on a web site, accessible to Oracle sales and product development personnel and to Oracle partners.

Customers should always have their Oracle sales channel verify, from the web site, that the combination of phone switch, switch vendor software and version, switch configuration, CTI middleware software and version are compatible and supported, prior to making an implementation plan.

5.3.2 Installing the CT-Connect Client

CT-Connect client allows the Oracle Telephony Adapter Server to communicate with the CT-Connect Server for call control.

Note: If you are using Cisco ICM as your middleware, you do not need to perform this task. There is no "client" with Cisco ICM.

CT-Connect Client is easy to install by using its accompanying wizard. The field engineer performing the installation should know the name of the CT- Connect server.

Refer to the CT-Connect installation documentation for instructions on installing CT-Connect Client. You must have the same version of CT Connect for the server and the client.

5.3.3 Configuring the CTI Middleware

The middleware should be configured in a server group and should be shared by all the Dial Servers in that server group. While it is possible to have more than one server group in an interaction center environment, there will most likely only be one, since you cannot share resources between different server groups.

Use the steps below to configure the CTI middleware.

Prerequisites

If there is only one telephony adapter server node, the middleware configuration should have already been accomplished in the Advanced Inbound installation and configuration process. Some parameters may have already been defined during the Advanced Inbound installation. However, additional Advanced Outbound parameters must be defined.

If there are multiple telephony adapter server nodes, then Middleware must be configured for each of the telephony adapter server nodes.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click the **Call Center** tab.
2. Click the Middleware subtab.
3. In the Choose Server Group field, select the server group for which you want to configure middleware.
4. Click **Create**.

   The Middleware Details page appears.
5. In the Middleware Name field, type a name for your middleware.

   Record this name as you will need it when configuring the parameters for the Oracle Telephony Adapter Server.
6. From the list in the Middleware Type field, select **Connectors for Cisco ICM** or **Connectors for CT-Connect**.

7. Click **Update**.

   The Middleware Details page refreshes to display additional fields and a list of parameter fields for the middleware.

8. In the IP address field, type the IP address of the machine on which the telephony adapter server resides.

9. In the Port field, type the port number for your telephony adapter server.

10. In the provided parameter fields, enter the following parameters:

    - **PBX Name** - links logical identifier defined in CT Connect configuration to represent the CTI link between CT Connect and the switch.
    - **PBX Type** - PBX type. Choose:
      - Avaya Definity
      - Alcatel 4400
      - Ericsson MD110
      - Nortel Meridian or Symposium Call Center Server
      - Rockwell Spectrum
      - Siemens HICOM
    - **CTI Enabler Service IP Address** - IP address of the CT Connect server
    - **Middleware Server Info 1 - 6** - Port numbers of the Cisco ICM CTI servers (Port A, B, C, etc.).
    - **Domestic Dialing Prefix** - Numeric prefix dialed when placing domestic calls.
    - **International Dialing Prefix** - Numeric prefix dialed for placing international calls.
    - **Outgoing Prefix** - Numeric prefix dialed to place an outside call. Check against the configuration of the PBX.
    - **Site Area Code** - The area code for the site where the PBX is located.
    - **Site Country Code** - The country code for the site where the PBX is located.
    - **Site Internal Number Length** - Sets the allowable number of digits for the internal number.

- **Use Advanced Outbound** - Indicates where the Oracle Telephony Adapter Server is being used for AO. This must be set whenever VDU boards are being housed on the node. (type **Yes**).
- **Predictive Answer Flag** - Specifies how the predictive call will be answered. Should be set to either "Event" or "Time".

  Note: Although "Time" is listed, it is currently not being implemented.

- **Predictive Transfer Flag** - This indicates how the predictive call will be transferred. This should be set to "Event", "Single Step" or "Time".

  Note: Although "Time" is listed, it is currently not being implemented.

- **Predictive Transfer Wait Time** - If the Predictive Transfer Flag is set to "Time", then this field is used to specify the time before transferring.

  Note: "Time", is currently not being implemented.

- **Predictive answer wait time** - If the Predictive Answer Flag is set to Time, then this field is used to specify the time before answering.

  Note: "Time", is currently not being implemented.

  ---

11. Click **Update**.

    The CTI middleware is created and configured.

5.4 Configuring TableSpaces in Your Database

Advanced Outbound generally requires larger tablespace sizes than the default values provide. Tablespace size is dependent on a number of factors, including: hard drive size, size of calling lists, system memory, and number of tablespaces defined. However, Oracle recommends utilizing around 100 megs per defined tablespace.

When tablespace size is too small, several errors can occur, including:

- If a target group stays in the 'Validating' status for an extended period of time, it is likely the case that validation has failed, but was unable to update the status to "Failed Validation". This usually occurs when there is a tablespace issue and the error message could not be logged. After the tablespace is increased, the target group will automatically resume validation.
- If you stop seeing new error messages (beyond a specific date) in the IEO Log Viewer, it is very likely that you need to extend your tablespace. This is especially true if you are running into other errors that cannot be explained since other parts of the application may be failing, but are unable to log the errors due to the tablespace issues.

Contact your DBA to adjust your tablespace sizes for Advanced Outbound. Also, if your DBA will allow it, Oracle recommends utilizing the autoextend feature.

5.5 Implementing the Advanced Outbound Servers

Creating the Telephony Adapter Server and Configuring its Parameters

Creating the Central Server and Configuring its Parameters

Creating the Dial Server and Configuring its Parameters

Starting and Stopping the Servers

5.5.1 Creating the Telephony Adapter Server and Configuring its Parameters

Oracle Telephony Adapter Server (OTAS) is the intermediary between the telephony platform (PBX/ACD and CTI Middleware) and Oracle Advanced Inbound. OTAS is installed as part of the standard E-Business installation.

Follow the steps below to create the telephony adapter server and configure its parameters for Advanced Outbound.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click **ICSM > Server Groups**.

   The Server Group List page appears.

2. From the list of server groups, click the server group to which you want to add the Oracle Telephony Adapter Server.

   The Server Group Details page refreshes to display information for the selected server group.

3. Click **Create**.

   The Server Details page appears.

4. In the Server Name field, type a name for the server you are creating.
5. From the list in the Server Type field, select **Telephony Adapter Server.**
6. From the list in the Member Server Group field, select the name of the server group where the Telephony Adapter Server will reside.
7. If this server group is part of a Super Group, select the super group name from the list in the Using Server Group field.
8. Click **Save**.
9. On the Server Details page, click **Parameters**.

   The Server Details page refreshes to display parameters fields for the selected server.

10. In the Database Logging field, type the level you wish to use for database logs.

    The following are valid levels:

    – **all** – this will ensure that all requests to log (except "debug") are forwarded.

    – **debug** – this will ensure that all requests to log are forwarded.

    – **info** – this will forward all log requests except debug level logs.

    – **warn** – this will forward all log requests except info and debug level logs.

    – **error** – this will only forward error and fatal level logs.

    – **fatal** – this will only forward fatal level logs.

    – **none** – nothing is logged.

11. In the Middleware Configuration Name field, type the middleware name you used in the Configuring the CTI Middleware topic.

12. In the Trace Level field, type the trace level you want to use.

    The server trace function provides more detailed information about server activity.

    Important: This feature is very important for diagnosing issues and troubleshooting the server. Oracle recommends you set the trace level to **all**. For more information on trace file settings, refer to the Diagnostic and Troubleshooting section of this guide.

    ---

13. Click **Update**.
14. On the Server Details page, click **Advanced**.

    The Server Details page refreshes to display advanced parameter fields for the selected server.
15. In the Java Options field, the –ms and –mx VM parameters should be set depending on the number of agents you expect to service.

    These are the minimum and maximum values for the Virtual Machine. These values cannot be changed dynamically; you will need to restart the server for changes to take effect. Refer to the *Technology, Requirements, and Performance* section of this guide, for information on what values to enter for these parameters.
16. In the Server Arguments field, type:
    - **-logfile all** - this traces through the startup steps until database logging starts, or
    - **-logfile <path>/log.txt** - this will generate a log.txt file in the designated location.
17. Click **Done**.
18. Once you have created the OTAS server, you must verify that you have two necessary .dll files in the ICSM/admin/scripts directory. This directory will be in the location you specified during ICSM installation.

    The two files are:
    - iecvdu.dll.
    - the third party CTI middleware .dll for CT-Connect.

5.5.2 Creating the AO Central Server and Configure its Parameters

Follow the steps below to create the AO Central Server (OCS) and configure its parameters.

Prerequisites

ICSM must be installed and started, and you must have already defined a server group before you can create a Central Server or configure its parameters. These tasks should have been performed during the installation and implementation of Oracle ICSM. For more information, refer to the *Oracle Applications Interaction Center Implementation Guide*.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click the **ICSM** tab.

   The Server Group List page appears. This is the default page.

2. From the Server Group List page, select the server group in which the AO Central Server is defined.

   > **Note:** If the server group name is not listed, click the **Next** or **Last** hyperlinks located at the bottom of the page to view more server groups.

3. In the Server section, click **Create**.

   The Server Details page appears.

4. On the Server Details page, enter the server name, server type (use **Advanced Outbound Central Server**), location, description, member server group, using server group, and node assignment in the provided fields.
5. Click **Save**.
6. On the Server Details page, click **Parameters**.

The Server Details page refreshes to display parameter fields for the selected server.

7. Define the following parameters:

Server Parameters

AO Server Max Database Retries

The number of times the OCS server will attempt to connect to the database prior to stopping the server.

Default Value: 5

If a value is not given, then the server will default to 0.

AO Server Max Thread Count

The maximum number of threads the server will maintain in the thread pool. The number of threads can exceed this limit to 120% of this number, but once the threads have been used they are then destroyed.

Default Value: 100

If a value is not given then the server will default to 100. Oracle recommends you set this parameter to at least 200.

OAO Log Level

The threshold value the logger will use to determine if a log request is forwarded to the log. Values for this parameter from least to most restrictive are:

- **all** – this will ensure that all requests to log (except "debug") are forwarded.
- **debug** – this will ensure that all requests to log are forwarded.
- **info** – this will forward all log requests except debug level logs.
- **warn** – this will forward all log requests except info and debug level logs.
- **error** – this will only forward error and fatal level logs.
- **fatal** – this will only forward fatal level logs.
- **none** – nothing is logged.

Default Value: **info**.

If a value is not given then the server will default to info.

OAO Server Version

Gives the current version of the OCS. This is given in the form of <major release>.<version>. At this time this is the level of specification.

Default value: 11.5

If a value is not given then the server will disregard.

AO Server Configuration Refresh Rate

The interval of time between OCS returning to the IEO schema to ensure that it is using the latest values for the server and plugin parameters. This value is given in minutes.

Default value: 15

If a value is not given then the server will default to 15.

Trace Level

The level at which the server trace function will provide information about server activity. Oracle recommends you set this to **all**.

Important: This feature is very important for diagnosing issues and troubleshooting the server. Oracle recommends you set the trace level to **all**. For more information on trace file settings, refer to the Diagnostic and Troubleshooting section of this guide.

Retrieve Parameters

Retrieve Execution Interval

The interval of time between the Retrieve Plugin attempting to prefetch entries into the cache (to fetch a certain number of records into the cache before these records are requested by the dial server).

Default Value: 5

If the parameter does not exist then the server will default to 5. If the value is set to 0 then the plugin will shutdown until the value is reset to a value above 0.

Retrieve Low Threshold Percentage

The Retrieve Plugin uses an algorithm to determine how many entries are necessary to prefetch in order to keep up with the demand placed on it by its clients. The algorithm uses this value as a threshold to determine if the state of the prefetch cache is extremely low and the number of entries to prefetch should be increased.

Default Value: 20

If a value is not given or the parameter does not exist then the server will default to 20.

Retrieve High Threshold Percentage

The Retrieve Plugin uses an algorithm to determine how many entries are necessary to prefetch in order to keep up with the demand placed on it by its clients. The algorithm uses this value as a threshold to determine if the state of the prefetch cache is extremely high and the number of entries to prefetch should be decreased.

Default Value: 80

If a value is not given or the parameter does not exist then the server will default to 80.

Retrieve List Increase Percentage

The Retrieve Plugin uses an algorithm to determine how many entries are necessary to prefetch in order to keep up with the demand placed on it by its clients. The algorithm used this value as the percentage to increase the number of prefetch entries.

Default Value: 25

If a value is not given or the parameter does not exist then the server will default to 25.

Retrieve Initial Cache Percentage

If the Retrieve Plugin determines that no entries have been previously prefetched for this list, it uses this value to determine the percentage of the list that should be used and the initial value of entries that need to be prefetched.

Default Value: 25

If a value is not given or the parameter does not exist then the server will default to 25.

Callback Parameters

Callback Execution Interval

The interval of time between the Callback Plugin attempting to prefetch callback entries into the cache. This parameter can be used to tune OCS. In most situations the callback execution interval will be smaller than the retrieve callback execution interval. This value is given in minutes.

Default Value: 1

If the parameter does not exist then the server will default to 1. If the value is set to 0 then the plugin will shutdown until the value is reset to a value above 0.

Callable Parameters

Callable Execution Interval

The interval of time between the Callable Plugin attempting to update the interval of time an entry is callable. This effects the determination of callable zones for a specific target group using the callable calendars. Because the calling calendars are specified in 30 minute intervals, the value for this parameter can be up to 30. However, setting the value this high could effect the interval of time prior to OCS adjusting to changes in the calling calendars. This parameter can be used to tune OCS. This value is given in minutes.

Default Value: 10

If the parameter does not exist then the server will default to 10. If the value is set to 0 then the plugin will shutdown until the value is reset to a value above 0.

Recover Parameters

Recover Execution Interval

The interval of time between the Recover Plugin attempting to recover entries that have been determined to be lost in the system. This parameter can be used to tune OCS. This value is given in minutes.

Default Value: 60

If the parameter does not exist then the server will default to 60. If the value is set to 0 then the plugin will shutdown until the value is reset to a value above 0.

Recover Lost Interval

The interval of time the recover plugin uses to determine if an entry should be considered to be lost in the system. When OCS prefetches an entry, it sets the time that the entry was checked out and a flag indicating the entry was checked out. When OCS recycles an entry, it resets the flag to indicate that the entry is no longer checked out. If during the Recover Plugin's execution cycle, it determines that an entry has been checked out for longer than the value of this parameter, it marks the entry as lost and recycles it. This value is given in minutes.

Default Value: 1440

If the value is not set or the parameter does not exist, then the server will default to 1440.

Report Parameters

Report Generation Execution Interval

The interval of time between the Report Plugin attempting to execute the reporting methods. This parameter can be used to tune OCS. This value is given in minutes.

Default Value: 15

If the parameter does not exist then the server will default to 15. If the value is set to 0 then the plugin will shutdown until the value is reset to a value above 0.

Refresh Parameters

Refresh Execution Interval

The interval of time between the Refresh Plugin attempting to recover entries that have been determined to be stale in the cache. This parameter can be used to tune OCS. This value is given in minutes.

Default Value: 30

If the parameter does not exist then the server will default to 30. If the value is set to 0 then the plugin will shutdown until the value is reset to a value above 0.

Refresh Stale Interval

The interval of time the refresh plugin uses to determine if an entry should be considered to be stale in the system. When OCS prefects an entry, it sets the time that the entry was checked out and a flag indicating the entry was checked out. When the target group management client retrieves the entry, it effectively removes it from the cache. When OCS recycles an entry, it resets the flag to indicate that the entry is no longer checked out. If during the Refresh Plugin's execution cycle, it determines that an entry has resided in the cache for longer than the value of this parameter, it marks the entry as stale and recycles it. This value is given in minutes.

Default Value: 60

If the value is not set or the parameter does not exist, then the server will default to 60.

Validation Parameters

Validation Execution Interval

The interval of time between the Validation Plugin attempting to run the validation routines on target groups. This parameter can be used to tune OCS. This value is given in minutes.

Default Value: 15

If the parameter does not exist then the server will default to 15. If the value is set to 0 then the plugin will shutdown until the value is reset to a value above 0.

Recycle Parameters

Recycle Execution Interval

The interval of time between the Recycle Plugin attempting to run the recycling routines on entries that have been marked in need of recycling. This parameter can be used to tune OCS. This value is given in minutes.

Default Value: 2

If the parameter does not exist then the server will default to 1. If the value is set to 0 then the plugin will shutdown until the value is reset to a value above 0.

Status Parameters

Status Execution Interval

The interval of time between the Status Plugin attempting to run the routines that maintain the correct statuses for target groups. This value will govern how quickly OCS adapts to target group and schedule status changes. This parameter can be used to tune OCS. This value is given in minutes.

Default Value: 5

If the parameter does not exist, then the server will default to 5. If the value is set to 0, then the plugin will shutdown until the value is reset to a value above 0.

8. Click **Update**.
9. On the Server Details page, click **Advanced**.

   The Server Details page refreshes to display advanced parameters for the selected server.
10. In the Java Options field, the –ms and –mx VM parameters should be set depending on the number of agents you expect to service.

    These are the minimum and maximum values for the Virtual Machine. These values cannot be changed dynamically; you will need to restart the server for changes to take effect.

    Oracle recommends you set these parameters to -ms128m -mx256m. Refer to the *Technology, Requirements, and Performance* section of this guide, for information on what values to enter for these parameters.
11. In the Server Arguments field, type:
    - **-logfile all** - this traces through the startup steps until database logging starts
    - **-logfile /<location>/log.txt** - this will generate a log.txt file, and an OCS***.trace file (where *** is a time stamp) in the designated location.
12. Click **Done**.

5.5.3 Creating the AO Dial Server and Configure its Parameters

Use the steps below to create the AO Dial Server (AODS) and configure its parameters.

Prerequisites

ICSM must be installed and started, and you must have already defined a server group before you can create a Dial Server or configure its parameters. These tasks should have been performed during the installation and implementation of Oracle

ICSM. For more information, refer to the *Oracle Applications Interaction Center Implementation Guide*.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click the **ICSM** tab.

   The Server Group List page appears. This is the default page.

2. From the Server Group List page, select the server group in which the AO Dial Server is defined.
3. In the Server section, click **Create**.

   The Server Details page appears.

4. On the Server Details page, enter the server name, server type (use **Advanced Outbound Dial Server**), location, description, member server group, using server group, and node assignment in the provided fields.
5. Click **Save**.
6. On the Server Details page, click **Parameters**.

   The Server Details page refreshes to display parameter fields for the selected server.

7. Define the following parameters:

Server Parameters

AO Server Max Database Retries

Number of times AODS server will attempt to connect to the database. It then increases the wait time and tries again.

Default Value: 5

If a value is not given, then the server will default to 5.

AO Server Max Thread Count

Maximum number of threads server will maintain in the thread pool.

Default Value: 100

If a value is not given then the server will default to 100.

Oracle recommends the following settings:

Number of Agents	Maximum Thread Count
50 or less	200
51 to 100	300
101 to 250	500
251 to 500	1000

OAO Log Level

Threshold value logger will use to determine if a log request is forwarded to the log. Values for this parameter are:

- **all** – this will ensure that all requests to log (except "debug") are forwarded.
- **debug** – this will ensure that all requests to log are forwarded.
- **info** – this will forward all log requests except debug level logs.
- **warn** – this will forward all log requests except info and debug level logs.
- **error** – this will only forward error and fatal level logs.
- **fatal** – this will only forward fatal level logs.
- **none** – nothing is logged.

If a value is not given then the server will default to info.

OAO Server Version

Gives the current version of the AODS. This is given in the form of <major release>.<version>. At this time this is the level of specification.

Default value: 11.5

If a value is not given then the server will disregard.

AO Server Configuration Refresh Rate

This is time in minutes that the server will go back to the database to see if any of the following configuration has been changed:

– If the server configuration has itself been changed (mainly loglevel)

– If a campaigns configuration has changed (Predictive to a Non-Predictive case or vice-versa).

– If a new campaign schedule has now become active (and has at least one target group in executing state OR if a target group of this active campaign schedule is now executing)

Default value: 15

If a value is not given then the server will default to 15.

Trace Level

The level at which the server trace function will provide information about server activity. Oracle recommends you set this to **all**.

Important: This feature is very important for diagnosing issues and troubleshooting the server. Oracle recommends you set the trace level to **all**. For more information on trace file settings, refer to the Diagnostic and Troubleshooting section of this guide.

---

8. Click **Update**.
9. On the Server Details page, click **Advanced**.

   The Server Details page refreshes to display advanced parameter fields for the selected server.
10. In the Java Options field, the –ms and –mx VM parameters should be set depending on the number of agents you expect to service.

    These are the minimum and maximum values for the Virtual Machine. These values cannot be changed dynamically; you will need to restart the server for changes to take effect.

Number of Agents	ms Setting	mx Setting
50 or less	-ms128m	-mx256m
51 to 100	-ms128m	-mx256m

Number of Agents	ms Setting	mx Setting
101 to 250	-ms256m	-mx512m
251 to 500	-ms512m	-mx1024m

11. In the Server Arguments field, type:
    - **-logfile all** - this traces through the startup steps until database logging starts
    - **-logfile /<location>/log.txt** - this will generate a log.txt file, and a PRS***.trace file (where *** is a time stamp) in the designated location.
12. Click **Done**.

5.5.4 Starting and Stopping the Servers

Starting All Servers in a Server Group

Login
HTML Login URL

Responsibility
Call Center HTML Administration

Steps
1. Click **ICSM > Server Groups**.
2. From the list of server groups, click the server group name of the server group in which the servers you want to start reside.

   The Server Group Details page appears.
3. In the Server Group Details area, select **Start** and then click **Submit**.

   It may take several minutes to start the server processes. To view the current status during startup, refresh the browser several times.

   As the server processes are starting up, "Starting" is displayed in the Stop/Start column. The status of each server process is displayed in the Servers area in the Status column.

Stopping All Servers in a Server Group

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click **ICSM > Server Groups**.
2. From the list of server groups, click the server group name of the server group in which the servers you want to stop reside.

   The Server Group Details page appears.
3. In the Server Group Details area, select **Stop** and then click **Submit**.

   It may take several minutes to start the server processes. To view the current status during startup, refresh the browser several times.

   As the server processes are starting up, "Stopping" is displayed in the Stop/Start column. The status of each server process is displayed in the Servers area in the Status column.

5.6 Installing the VDU Boards and the Dialogic Software

Note: This is only necessary if predictive dialing will be used.

To install the VDU boards, refer to the installation instructions from the board manufacturer. You will need the assistance of a phone company engineer or an engineer from Dialogic to aid in providing information.

Servers housing VDU cards must run Windows NT or 2000. The extensions on the PBX should be allocated for use by Advanced Outbound, and a simple test using the tools shipped with the VDU hardware can be run.

Each dialogic VDU board has a rotary switch that allows you to determine the board order (if there will be more than one board installed in a single machine). Oracle Advanced Outbound supports up to sixteen boards on a single machine. If you are only installing one board, then you must set the rotary switch to 0. If you are installing multiple boards, then the rotary setting for the first board must be set to 0, the rotary switch for the second board must be set to 1, and so on.

Use the steps below to install the VDU software on the server housing the VDU card(s).

Prerequisites

Before you can install the VDU software, the VDU board(s) must first be installed. Oracle Telephony Adapter Server must be installed and you must have an appropriate middleware configured in a server group.

Note: After installing the VDU card on the server, you need to reboot the system before you can install and configure the VDU software. This software must be installed on every server that will house VDU cards for Predictive dialing.

Important: You should note the board slot identification switch on the VDU board(s) as they are being installed. Each board dial setting on the same server node must be unique.

Steps

1. From your desktop, click **Start** > **Programs** > **Dialogic System Software** > **Dialogic Configuration Manager (DCM)**.

   The Dialogic Configuration Manager page appears.

2. On the Dialogic Configuration Manager page, click **Configuration Manager**.

   The Dialogic Configuration Manager automatically detects the VDU card and generates a list of VDU cards.

3. From the list of VDU cards, select the desired VDU card and click the green (Go) button.

Note: If you highlight a card that is already running, a red (stop sign) is displayed. The green or red status determines whether or not the service is currently running.

---

4. On the Dialogic Configuration Manager page, click **Service**, then **Startup Mode**.

   The Startup Mode page appears.

5. Select **Automatic**.

6. Click **Close**.

5.7 Setting up Oracle Interaction History

Oracle Interaction History contains many seeded outcome, result, and reason codes. However, you can also create your own custom outcome, result, and reason codes, as well as your own outcome - result, and result - reason mappings.

This topic group includes the following topics:

Defining Outcome Codes

Defining Result Codes

Defining Reason Codes

Mapping Outcome Codes to Result Codes

Mapping Result Codes to Reason Codes

5.7.1 Defining Outcome Codes

The outcome is the immediate response to an agent's call, such as Contact, No Answer, or Busy. One outcome can be used by more than one campaign. To close an interaction, the agent must report an outcome.

Follow the steps below to define the outcome codes that an agent can use.

Login

Self-Service Login URL (Forms)

Responsibility

Interaction History

Steps

1. Click **Interaction History Administration**.

   The Interaction History Administration page appears.

2. Click the Outcomes tab.
3. For each outcome code you want to create, you must provide the following:
   - Outcome Code - name for your outcome code
   - Short Description - description of what the outcome code is
4. If you need to use Numeric Values, select the **Telephony Related** check box.

> **Note:** Some telephony-related applications use Numeric Values, which are recorded as the Versatility Code in database tables. Versatility Codes are used by version 3i of the following applications: Oracle TeleBusiness for Telecom/Utilities, Oracle TeleBusiness for Financial Services, Oracle Integration Manager, and Oracle Campaign Plus. If you do not use these earlier applications, you do not need to use Numeric Values.

5. Select either Success option–**Yes** or **No**–and enter the appropriate Numeric Value.

   Yes has a range of 1 to 100; **No** has a range of 101 to 255.
6. Click the **Save** icon to save the outcome definition.

5.7.2 Defining Result Codes

A result of a transaction is the business-related consequence of the agent's call, such as Sale, No Sale, or Complaint. While all transactions must have an outcome, a result is not mandatory. Perform the following steps to define a result.

Follow the steps below to define the result codes that an agent can use.

Prerequisites

None

Login

Self-Service Login URL (Forms)

Responsibility

Interaction History

Steps

1. Click **Interaction History Administration**.

   The Interaction History Administration page appears.

2. Click the **Results** tab.

3. For each result code you want to create, you must provide the following:

   - Result Code - name for your result code
   - Short Description - description of what the result code is

4. If the business rules of the enterprise require a Reason for every Result, select the **Reason Required** check box.

6. Click the **Save** icon to save the result definition.

5.7.3 Defining Reason Codes

Follow the steps below to define the reason codes that an agent can use.

Login

Self-Service Login URL (Forms)

Responsibility

Interaction History

Steps

1. Click **Interaction History Administration**.

   The Interaction History Administration page appears.

2. Click the **Reasons** tab.

3. For each reason code you want to create, you must provide the following:

   - Reason Code - name for your reason code
   - Short Description - description of what the reason code is

6. Click the **Save** icon to save the reason definition.

5.7.4 Mapping Outcome Codes to Result Codes

You can create a new option by pairing an Outcome with a Result. Any Outcome may be paired with more than one Result. Each pair appears as one option on the agent's screen.

Follow the steps below to pair an outcome with a result.

Login

Self-Service Login URL (Forms)

Responsibility

Interaction History

Steps

1. Click **Interaction History Administration**.

   The Interaction History Administration page appears.

2. Click the **Outcome - Results** tab.
3. Select a value from the Outcomes list.
4. Select a value from the Results list.
5. Click the **Save** icon to save the Outcome-Result pair.

5.7.5 Mapping Result Codes to Reason Codes

You can create a new option by pairing a Result with a Reason. Any Result may be paired with more than one Reason. Each pair appears as one option on the agent's screen.

Follow the steps below to pair a result with a reason.

Login

Self-Service Login URL (Forms)

Responsibility

Interaction History

Steps

1. Click **Interaction History Administration**.

The Interaction History Administration page appears.

2. Click the **Result - Reasons** tab.
3. Select a value from the Outcomes list.
4. Select a value from the Results list.
5. Click the **Save** icon to save the Outcome-Result pair.

5.8 Setting up Oracle Marketing Online

This topic group includes the following topics:

Refreshing Advanced Outbound Record Counts

Defining Advanced Outbound List Source Types

Creating a Custom Setup for Advanced Outbound Campaign Schedules

Creating an OMO Campaign

Creating an OMO Campaign Schedule

Invoking the Concurrent Processor for OMO List Generation

Configuring an OMO List

Configuring an OMO Target Group

Associating a Call Script to a Campaign Schedule

Associating Outcome Codes to the Campaign Schedule

Performing the Agent — Campaign Schedule Assignment

5.8.1 Refreshing Advanced Outbound Record Counts

The concurrent processor runs events in the database. The refreshing of Advanced Outbound record counts can be scheduled as a concurrent process. With the concurrent Processor, you can schedule these runs as a one time only event, or a regularly occurring event.

Follow the steps below to invoke the concurrent processor to refresh AO record counts.

Login

Self Service Login URL

Responsibility

Advanced Outbound Concurrent Requests

Steps

1. Click **Concurrent Requests > Run**.

   The Submit a New Request dialog box appears.

2. On the Submit a New Request dialog box, select **Single Request**, and click **OK**.

   The Submit Request dialog box appears.

3. From the list in the Name field, select **Advanced Outbound Refresh Available Records Count**.
4. Click **OK**.
5. To schedule when the run will occur, click **Schedule**, select when to run the process, and click **OK**.
6. To schedule what actions to perform upon completion of the run, click **Options**, type the name of who you want to notify, or type the printer name where you want to send the results of the run to print, then click **OK**.
7. Click **Submit** to run the request.

5.8.2 Defining Advanced Outbound List Source Types

A list source type is a concept used by Oracle Marketing to define how fields from the database (typically AMS_LIST_ENTRIES) map to the columns of a target group entry. A target group entry has several hundred generic columns; the source type, for example, states that the phone number will go into column 1 and the name will go into column 2. Advanced Outbound utilizes two list source types:

- Organization Contact List
- Person List

Oracle Advanced Outbound recycling algorithms and record filters are directly associated to source types because they define which fields are present in a target group.

Important: While both of these list source types are seeded in OMO, however, they are NOT defined in the database until this procedure is performed. It is crucial that you A missing source type view will cause a validation error.

Follow the steps below to define the two required list source types for Advanced Outbound.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click **Administration > Marketing > Audience > Data Sources**.

   The List Source Type Overview page appears, displaying a summary view table of any existing source types.

2. From the list of source types, click **Organization Contact List**.

   The List Source Types page appears, displaying a summary view table of all fields names defined for that source type.

3. Ensure that the following fields names are present:

   Per customer – used in the screen pop, or to check for DNC, release control, or stop list.

   - PERSON_FIRST_NAME
   - PERSON_LAST_NAME
   - PERSON_NAME_SUFFIX
   - PERSON_TITLE
   - PIN_CODE
   - PARTY_NAME
   - PARTY_ID
   - SOURCE_CODE

- SOURCE_CODE_FOR_ID
- PARTY_SITE_ID
- POSTAL_CODE

Per phone number – required by AO for each phone number

- CONTACT_POINT_ID
- TIME_ZONE
- PHONE_COUNTRY_CODE
- PHONE_AREA_CODE
- PHONE_NUMBER
- RAW_PHONE_NUMBER
- REASON_CODE

If all of these fields are not present, you can add them by using the utility at the bottom of the table.

4. Click **Update**.

> **Note:** Clicking **Update**, defines the selected list source type in the database.

5. Repeat steps 3 and 4 for **Person List**.
6. Click **Update**.

> **Important:** While Oracle Marketing Online allows you to modify the source type fields or create your own custom source types, all the fields required by Advanced Outbound must be present and unmodified.

Verifying Your List Source Types are in the Database

You can run a SQL query to check your list source types (this query should be executed in a sqlplus session):

```
SELECT VIEW_NAME

FROM ALL_VIEWS
```

```
WHERE VIEW_NAME IN ('AMS_TAR_PERSON_LIST_V',
'AMS_TAR_ORGANIZATION_CONTACT_V')
AND OWNER = 'APPS';
```

We expect the following two rows to be returned:

```
AMS_TAR_ORGANIZATION_CONTACT_V
AMS_TAR_PERSON_LIST_V
```

If no rows are returned by this query, then the views do not exist in the database.

5.8.3 Creating a Custom Setup for Advanced Outbound Campaign Schedules

This is an optional step that eliminates the need to approve every campaign schedule before the campaign schedule can be executed with Advanced Outbound.

When creating a campaign or campaign schedule, you must specify a setup type for the campaign/campaign schedule. Marketing Online seeds a setup type, called **Direct Marketing – Telemarketing**, for campaign schedules to be executed through the Advanced Outbound channel. By default, this setup type requires an approval process.

To bypass the approval process, it is recommended another custom setup type be created, similar to the seeded Direct Marketing – Telemarketing setup type. However, you should leave the Budget Approval Process boxes unchecked when creating this custom setup type, this will eliminate the budget approval workflow process from being started. This is not a mandatory procedure in the implementation process.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click **Administration > Marketing > Setup > Custom Setup**.

   The Custom Setup page appears.

2. Click **Create**.

The Create Custom Setup page appears.

3. In the Setup Name field, type a name for the custom setup.
4. In the Associated With field, select **Campaign Schedule**.
5. In the Activity Type field, select **Direct Marketing**.
6. In the Activity field, select **Telemarketing**.
7. Ensure the Active box in checked.
8. Click **Create**.

   The Custom Setup Details page appears.
9. Ensure all of the boxes for Budget Approval are unchecked.
10. Click **Update**.

5.8.4 Creating an OMO Campaign

Campaigns are the vehicle for putting information about the organization's products, services, offers, and messages in front of customers and potential customers. Campaigns are a fundamental entity for Oracle Marketing and are never used directly by Advanced Outbound, although they contain the campaign schedules and target groups which are. One marketing campaign can have multiple campaign schedules associated with it and each of these campaign schedules can be targeted for different execution channels. For example a marketing campaign might have a campaign schedule associated with it that is targeted for email execution and another associated with it that is targeted for telephony execution.

Follow the steps below to create a campaign in Oracle Marketing Online.

Login

HTML Login URL

Responsibility

Oracle marketing Super User

Steps

1. Click the **Campaign** tab.

   The Campaigns page appears, displaying a summary view table of any existing campaigns.

2. Click **Create**.

   The Create Campaign page appears.

3. In the Setup Type field, type **Campaigns** if you will be using Oracle TeleSales as your business application, or **Collections** if you will be using Oracle Collections as your business application.
4. In the Name field, type a name for the campaign.
5. In the Version field, type a version number for the campaign. This numbering prevents campaigns with the same name from being active at the same time.
6. In the Start Date and End Date fields, set the appropriate start and end dates for your campaign.
7. In the Currency field, select the appropriate currency for your campaign.
8. In the Owner field, ensure the correct person is listed as the campaign owner.
9. In the Country field, search for and select the appropriate country.
10. From the list in the Language field, select the desired language for your campaign.
11. Click **Create**.

5.8.5 Creating an OMO Campaign Schedule

Follow the steps below to create a campaign schedule in Oracle Marketing Online.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click the **Campaign** tab.

   The Campaigns page appears, displaying a summary view table of any existing campaigns.

2. Click the campaign for which you want to create a campaign schedule.
3. From the side navigation panel, click the **Execution** hyperlink.

The Campaign Details – Campaign Schedule page appears.

4. Click **Create**.

   The Campaign Schedule – Create page appears.

5. In the Setup Type field, select the **Direct Marketing – Telemarketing** setup, or select the name of the custom setup type you defined without the approval process step. The selection here will auto-populate the Activity Type and Activity fields.
6. In the Name field, type a name for your campaign schedule.
7. Select the **Use Parent Source Code** box if you want the campaign schedule to default to the source type set for the campaign (Person List or Organization List).
8. From the list in the Language field, select the desired language for your campaign.
9. In the Coordinator field, ensure the correct person is listed as the campaign schedule coordinator.
10. In the Currency field, select the appropriate currency for your campaign.
11. In the Time Zone field, select the appropriate time zone. The time zone you select here is the time zone for the geographic location where the schedule activity will be taking place.
12. In the Start Date field, select a starting date for the campaign schedule that is within the date parameters of the parent campaign.
13. Ensure the **Do Not Use Trigger** radio button is selected.
14. Click **Create**.

5.8.6 Invoking the Concurrent Processor for OMO List Generation

This concurrent program needs to be running to generate Standard lists and change their list status to Available. Otherwise the list status will become stuck in Generating status. This process should only be performed once for each list.

Follow the steps below to invoke the concurrent processor to generate OMO lists.

Login

Self Service Login URL

Responsibility

System Administrator

Steps

1. Click **Concurrent > Requests**.

   The Find Requests dialog box appears.

2. On the Find Requests dialog box, click **Submit a New Request**.

   The Submit a New Request dialog box appears.

3. On the Submit a New Request dialog box, select **Single Request**, and click ***OK***.

   The Submit Request dialog box appears.

4. From the list in the Name field, select **Workflow Background Process**, and click **OK**.

   The Parameters dialog box appears.

5. In the Item Type field of the Parameters dialog box, select **AMS: List Generation** and click **OK**.
6. Select values for the Process Deferred, Process Timeout and Process Stuck fields, and click **OK**.
7. In the At these Times… field, set when you want to run the process by clicking Schedule, selecting the appropriate time, and clicking **OK**.
8. Click **Submit**.
9. Click **Submit** to run the request.

5.8.7 Configuring an OMO List

List configuration is a multi-step process that starts with the creation of a list in OMO, which results in a list object — an empty container awaiting records. Thereafter, you must identify a record source, add the records to the list, and generate the list.

This topic group includes the following topics:

Creating a List

Importing Record Sources Into OMO

Adding Record Sources to the List

Generating the List

5.8.7.1 Creating a List in Oracle Marketing Online

Follow the steps below to define a list in Oracle Marketing Online. Until record sources are subsequently defined for the list, it will remain in Draft status.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click **Audience > List**.

   The Lists page appears, displaying a summary view table of any existing lists.

2. Click **Create**.

   The Create List page appears.

3. In the Name field, type a name for your list.

4. From the list in the Type field, select **Standard**.

5. From the list in the Source Type field, select the source type you want to use with your list. For AO, valid source types are Persons or Organization Contacts.

6. If the appropriate person is not populated in the Owner field, do the following:

   a. Enter your search criteria in the Owner field and click **Go**.

   - You can use the % wildcard search character.
   - One-character searches are supported.
   - For exact title matches, enter search criteria using the syntax <Lastname>, <Title> <Firstname>. For example, to obtain the record Mr. George Washington, type **Washington, Mr. George** and click **Go**.

   b. In the Resource Selector page, refine your search criteria if necessary.

   c. From the resulting list on the Resource Selector page, click the name of the appropriate owner.

   The Create List page refreshes, containing the selected value.

7. Click **Create**.

   The list is created.

Guidelines

- List types are not enforced by all applications. Manual lists can have each list entry manually designated from existing records. For all other lists, including lists that will be populated by Oracle Discoverer workbook, use Standard. Suppression lists contain list entries that other lists can use to filter out or suppress, effectively creating a stop-list mechanism that can be used for various other lists. Suppression lists are generally not used as lists of contacts to execute a campaign.
- The two required source types for Advanced Outbound are Persons and Organization Contacts. A list source type is a concept used by Oracle Marketing Online to define how fields from the database (typically TCA) map to the columns of a target group entry. A target group entry has several hundred generic columns; a specific list source type, for example, could state that the phone number will go into column 1 and the name will go into column 2. However, a different list source type could populate the first column with name and the second column with phone number.

5.8.7.2 Importing Record Sources Into Oracle Marketing Online

Follow the steps below to import record sources into Oracle Marketing Online.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click **Audience > Import**.

   The Import: Introduction page appears.

2. Click **Next**.
3. The Definition page appears.
4. In the Import Type field, select the type of record source you want to import.

5. In the Name field, type a name for the record source you want to import.
6. In the Source File area, designate the location of the record source you want to import and provide details on how the record source is organized.
7. Click **Next**.

   The Additional Details page appears.
8. In the provided fields, enter additional information about the record source you want to import.
9. Click **Next**.

   The Mapping page appears.
10. Establish the correct mapping for the columns in your list by highlighting a field in the Source Fields list, highlighting the corresponding value in the Target Fields list, then click the right arrow to move the mapping over to the Mapping list.
11. Click **Next**.

    The Review page appears.
12. If you want to automatically generate the list during the import process, click the **Generate a List upon Import** box, otherwise click **Import**.

    The Confirmation page appears, displaying a confirmation note stating that the list has been submitted for processing.
13. If you want to import another record source, click **New Import**, otherwise click **Finish**.

5.8.7.3 Adding Record Sources to the OMO List

Follow the steps below to

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click **Audience > List**.

The Lists page appears, displaying a summary view table of all existing lists.

2. From the table, click the list to which you want to add your imported record sources.

   The List – Main page appears.

3. From the side navigation panel, click **Selections**.

   The List – Selection page appears.

4. For each list:

   a. Specify the Order in which the record sources will be incorporated. The lowest numbered record source will be used first.

   b. Select the Operation. Operations are **Include**, **Exclude** and **Intersect**:

      – **Include** means to add all entries in the record source to the list. Include is a required operation for the first record source to be used.

      – **Exclude** means that any entries in the record source will be removed from the list. Exclude is generally used to remove a set of entries from larger record source that was included in the list.

      – **Intersect** means only entries that are in the intersected record source and the list (up to that point in the incorporation order), will remain on the list. Intersect can be used to create a list where the entries are selected for more than one reason (Example: a record source of people making over $100,000 intersected with a record source of people living in Montana will result in a list of people living in Montana who make more than $100,000).

   c. Select the Type. Types are Import List, List, SQL, Schedule, Segment, or Workbook.

   d. In the Name field, search for and select the name of the record source you want to add to the list.

   e. In the Dedupe Rank field, type a deduplication rank for the record source. A deduplication rank determines which record to retain when a user removes duplicate records after the list has been generated. Deduplication occurs only during an Include operation.

5. Click **Update**.

   The List – Selection page refreshes to display a confirmation message.

Guidelines

- When designating an order for list selection, each record source in the list must contain a unique number. The lowest numbered record source will be used first.
- The first record source must be of type "include" so that records will be included in the list. Designate all record sources to include prior to designating record sources to exclude.
- If one of the list sources is a suppression list or another list of type "exclude," designate this last in the list selection page, to ensure that records to be included will exist in the set from which exclusions are to occur.

5.8.7.4 Generating the OMO List

Follow the steps below to

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click **Audience > List**.

   The Lists page appears, displaying a summary view table of all existing lists.

2. From the table, click the list you want to generate.

   The List – Main page appears.

3. From the side navigation panel, click **Generation**.

   The List – Generation page appears.

4. Click the **Generate immediately** radio button if you want to generate the list now, or click the **Generate at a future time** radio button if you want to generate the list later.

   If you clicked the **Generate at a future time** radio button in the previous step, select the date, time and time zone for the generation.

5. In the Generation Type field, select the type of generation you want.

6. Click **Update**.

The List – Generation page refreshes to display a confirmation message.

5.8.8 Configuring an OMO Target Group

The configuration process for target groups involves:

Adding Generated Lists to the Target Group

Generating the Target Group and Setting its State to “Locked”

5.8.8.1 Adding Generated Lists to the Target Group

Follow the steps below to add a generated list to a target group.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click the **Campaign** tab.

   The Campaigns page appears, displaying a summary view table of all existing campaigns.

2. From the table, select the campaign containing the campaign schedule under which your target group will reside.

   The Campaign Details page appears.

3. From the side navigation panel on the Campaign Details page, click **Execution**.

   The Campaign Details - Campaign Schedule page appears, displaying a summary view table of all campaign schedules associated with the selected campaign.

4. From the summary view table, click the campaign schedule under which your target group will reside.

   The Campaign Schedule – Details page appears.

5. From the side navigation panel, click **Execution > Target Group**.

   The Campaign Schedule Details - Target Group page appears

6. From the Type field, select the type of list you are adding.
7. In the List Name field, search for and select the list you want to add.
8. Repeat the previous step for each list you want to add.
9. In the Target Group List Name field, type a name for your target group.
10. In the Source Type field, select a source type for your target group.
11. Click **Update**.

    The selected lists are added to the target group.

5.8.8.2 Generating the Target Group and Setting its State to “Locked”

Follow the steps below to generate the target group and set it’s list state to "Locked".

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click the **Campaign** tab.

   The Campaigns page appears, displaying a summary view table of all existing campaigns.

2. From the table, select the campaign containing the campaign schedule under which your target group resides.

   The Campaign Details page appears.

3. From the side navigation panel on the Campaign Details page, click **Execution**.

   The Campaign Details - Campaign Schedule page appears, displaying a summary view table of all campaign schedules associated with the selected campaign.

4. From the summary view table, click the campaign schedule under which your target group resides.

   The Campaign Schedule – Details page appears.

5. From the side navigation panel, click **Execution > Target Group**.

The Campaign Schedule Details - Target Group page appears

6. Click **Generate Target Group**.

   The target group generates and is automatically associated with the selected campaign schedule.

7. Scroll down the page and in the Target Group List Name field, click the name of the target group you just generated.

   The List –Entries page appears.

8. On the List –Entries page, click your target group name.

   The List - Main page appears.

9. In the Status field, select **Locked**.

10. Click **Update**.

    The selected target group list state is set to “Locked”.

5.8.9 Associating a Call Script to a Campaign Schedule

This step is optional. You would only associate a call script with your campaign schedule if you wanted to use Oracle Scripting with your outbound telephony campaign.

Follow the steps below to associate a script to your campaign schedule.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click the **Campaign** tab.

   The Campaigns page appears, displaying a summary view table of all existing campaigns.

2. From the table, select the campaign containing the campaign schedule under which your target group resides.

   The Campaign Details page appears.

3. From the side navigation panel on the Campaign Details page, click **Execution**.

   The Campaign Details - Campaign Schedule page appears, displaying a summary view table of all campaign schedules associated with the selected campaign.

4. From the summary view table, click the campaign schedule under which your target group resides.

   The Campaign Schedule – Details page appears.

5. From the side navigation panel, click **Collaboration**.

   The Campaign Schedule Details – Contact Point page appears, displaying a summary view table of any existing call scripts associated to the selected campaign schedule.

6. In the Type field, select **Outbound Script**.

7. In the Name field, search for and select the name of the specific call script you want to associate.

8. Click **Update**.

5.8.10 Associating Outcome Codes to the Campaign Schedule

Follow the steps below to associate outcome codes to your campaign schedule.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click **Administration > Sales > Outcome Assignments**.

2. Click **Go** to the right of the Campaign Schedule field.

   The Source Code window appears listing all of the available campaign schedules.

3. You can use the Keyword field to search for the campaign schedule of your choice:

a. Type a partial name in the Keyword field. You can use % sign to substitute for missing characters.

b. Click **Search**.

The Source Code page now lists only those campaign schedules matching your search criteria.

4. From the list, select the campaign schedule to which you want to associate outcome codes.

   The Campaign Outcome Assignments page appears.

5. Click **Add Outcome**.

6. In the Outcome Code field, search for and select the outcome you want to associate with the selected campaign schedule. Repeat this step for each outcome you want to associate to the campaign schedule.

7. Click **Update**.

5.8.11 Performing the Agent — Campaign Schedule Assignment

Before an Advanced Outbound campaign schedule may be executed by an Oracle TeleSales or Oracle Collections agent, the TeleSales or Collections agent must be assigned to the Campaign Schedule. This assignment allows the agent to view the campaign schedule as a node on the agent's UWQ Outbound Telephony.

You can associate campaign schedules and agents in the following ways:

- Assign campaign schedules to individual agents
- Assign individual agents to campaign schedules
- Assign campaign schedules to resource groups
- Assign resource groups to campaign schedules

Note: Agents will not be able to view the campaign schedule from UWQ, until the campaign schedule setup has been completed in Advanced Outbound and the campaign schedule has been set to an 'Active' state.

5.8.11.1 Assigning Campaign Schedules to Agents

Use this procedure to assign campaign schedules to agents.

Login
HTML Login URL

Responsibility
Oracle Marketing Super User

Steps
1. From the Oracle Marketing Online homepage, click the **Administration** tab.
2. Click the **Sales** subtab.
3. From the side panel under Call Center, click the **Campaign Assignments** hyperlink.
4. Under the Assign to heading:
   a. Select the Resource radio button.
   b. In the text box, type the agent's last name or a partial name. You can use the% sign to substitute for missing characters.
   c. Click **Go**.
   d. From the list, select the name of the agent you want to assign.

   The Campaign Assignment window displays the agent's name in the text box. Any campaign schedules already assigned to that agent appear listed below.
5. Click **Add Campaign**.

   A new line appears under the Current Campaign Assignments heading.
6. Click **Go**.

   The Valid Campaign Schedule list appears.
7. Select the name of the campaign schedule you wish to assign and click **OK**.

   The schedule you selected displays on the Campaign Assignment window.
8. Click **Update**.
9. Repeat this procedure for each campaign schedule you want to assign.

5.8.11.2 Assigning Agents to Campaign Schedules
Use this procedure to assign agents to individual campaign schedules.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. From the Oracle Marketing Online homepage, click the **Administration** tab.
2. Click the **Sales** subtab.
3. From the side panel under Call Center, click the **Agent Assignments** hyperlink.

   The Resource Assignment window appears.
4. In the Campaign Name field, type the name or a partial name of the campaign schedule you want to assign. You can use the % sign to substitute for missing characters.
5. Click **Go**.
6. From the list, select the campaign schedule you want to assign and click **OK**.

   The campaign schedule name populates the Campaign Name field.
7. Under the Assign to heading:
   a. Select the Resource radio button.
   b. Enter the agent's last name or a partial name in the text box. You can use the % sign to substitute for missing characters.
   c. Click **Go**.
   d. Select the Agent's name from the list.
8. Click **Update**.
9. Repeat this procedure for each campaign schedule you want to assign.

5.8.11.3 Assigning Campaign Schedules to Resource Groups

If you have a campaign schedule that you want to assign to a large number of agents, you can create a resource group for the agents and assign the campaign schedule to the resource group. This eliminates the need to assign the campaign schedule to each individual agent.

Use this procedure to assign campaign schedules to resource groups.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. From the Oracle Marketing Online homepage, click the **Administration** tab.
2. Click the **Sales** subtab.
3. From the side panel under Call Center, click the **Campaign Assignments** hyperlink.
4. Under the Assign to heading:
   a. Select the Resource Group radio button.
   b. In the text box, type the a partial name for the resource group. You can use the % sign to substitute for missing characters.
   c. Click **Go**.
   d. From the list, select the name of the resource group you want to assign.

   The Campaign Assignment window displays the resource group's name in the text box. Any campaign schedules already assigned to that resource group appear listed below.
5. Click **Add Campaign**.

   A new line appears under the Current Campaign Assignments heading.
6. Click **Go**.

   The Valid Campaign Schedule list appears.
7. Select the name of the campaign schedule you wish to assign.

   The schedule you selected displays on the Campaign Assignment window.
8. Click **Update**.
9. Repeat this procedure for each campaign schedule you want to assign.

5.8.11.4 Assigning Resource Groups to Campaign Schedules

If you have a large number of agents that you want to assign to a campaign schedule, you can create a resource group for the agents and assign the group to a particular campaign schedule. This eliminates the need to assign each individual agent to the campaign schedule.

Use this procedure to assign resource groups to campaign schedules.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. From the Oracle Marketing Online homepage, click the **Administration** tab.
2. Click the **Sales** subtab.
3. From the side panel under Call Center, click the **Agent Assignments** hyperlink.

   The Resource Assignment window appears.
4. In the Campaign Name field, type the name or a partial name of the campaign schedule you want to assign. You can use the % sign to substitute for missing characters.
5. Click **Go**.
6. From the list, select the campaign schedule you want to assign.

   The campaign schedule name populates the Campaign Name field.
7. Under the Assign to heading:
   a. Select the Resource Group radio button.
   b. Enter a partial name for the resource group in the text box. You can use the % sign to substitute for missing characters.
   c. Click **Go**.
   d. Select the resource group's name from the list.
8. Click **Update**.
9. Repeat this procedure for each resource group you want to assign.

5.9 Configuring Oracle Advanced Outbound

This topic group includes the following topics:

5.9.1 Configuring the Logical VDUs

Follow the steps below to configure VDUs to be used by Advanced Outbound. During this configuration process, you will need to provide information in three main areas:

- VDU information
- Board information
- Port information

Prerequisite

To create voice detection units, your user account must be assigned the Advanced Outbound Administrator responsibility. The VDU board must already be installed on the machine. You must contact your PBX administrator for the VDU board port extension numbers.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. On the Campaign Schedules page, click the **Telephony** tab.

   The Voice Detection Units page appears, displaying a summary view table of all existing VDUs. The Voice Detection Units page is the default view for the Telephony page.

2. On the Voice Detection Unit page, click **Create VDU**.

   The Create VDU page appears.

3. In the VDU Name field on the Create VDU page, type a name for the VDU.

   Note: VDU names have a 64 character limit and only the following characters are supported:

   - A-Z
   - 0-9
   - underscore, space, and hyphen

4. From the list in the VDU Board Name field, select the type of VDU board installed in your interaction center server group.

   Note: The VDU board name is the manufacturers name for the particular VDU board. Only VDU board names that are supported by Oracle Advanced Outbound will appear in the drop down list.

   The Port Type and Number of Ports fields will automatically update to reflect the correct information for the selected VDU Card.

5. From the list in the Server Group field, select the name of the server group where your VDU card is installed.

   The Middleware and Dial Server fields automatically update to reflect the possible middleware and dial server options for the selected server group.

6. If the middleware you want is not displayed in the Middleware field, select it from the list.

7. If the dial server you want is not displayed in the Dial Server field, select it from the list.

   A particular VDU can only be used by one dial server. This field is where you make the association between VDU and dial server.

8. Click **Next**.

   The VDU Board Information page appears, displaying the VDU name and VDU board name you supplied on the previous page.

9. From the list in the ROTARY SETTING field, select the rotary setting you want your VDU board to use.

   Note: Each Dialogic VDU board has a rotary switch that allows you to set a unique identifier for each board. This rotary setting is especially important when you have more than one board in machine. Dialogic supports up to 16 boards (rotary switch numbers 0 through 9, then A through F) in one machine. Rotary settings cannot carry a 2 digit setting number; therefore, any setting higher than 9 is assigned an alphabetic designation. Oracle Advanced Outbound require the rotary switch for the first board be set to 0, the rotary switch for the second board must be set to 1, etc. The rotary switch is set on the actual hardware board and the rotary setting you select in this step MUST correspond to that number. The selection you make in this step sets the rotary switch in the database.

   ---

10. Click **Next**.

    The VDU Port Information page appears, displaying a summary view table for all the existing ports on the selected VDU board.

11. From the VDU Port Information page, click **Auto Parameters**.

    The VDU Auto Generate Parameters page appears.

    Note: Steps 12-15 must be performed in the top set of fields on the VDU Auto Generate Parameters summary view table. Leaving the top set of fields blank will produce an error.

    ---

12. From the list in the Starting Port column of the summary view table, select the port number from which you want the auto-parameters utility to begin assigning extension numbers.
13. From the list in the Ending Port column of the summary view table, select the port number at which you want the auto-parameters utility to stop assigning extension numbers.

> **Note:** Your PBX Administrator assigns the port extensions for each VDU board. You must contact the PBX Administrator to obtain these extensions. The port extensions will typically be in a set sequential order (growing by one or more in value per port extension).

14. From the list in the Starting Value column of the summary view table, type the number your PBX Administrator assigned to the first port on your VDU board.
15. From the list in the Increase By column of the summary view table, type the value by which each port extension number increases.

> **Note:** This number is typically one or two, but can be any sequence your PBX Administrator assigns.

16. Click **Apply**.

    You return to the VDU Port Information page and the summary view table updates to display the port extensions you determined.
17. From the list in the status column for each port you want to be active, select **Active**.

> **Note:** **Active** should be the default setting for the port status. If you want to change the port status for a particular port to inactive, select **Inactive** from the list for that port in the status column.

18. Click **Create VDU**.

    The Voice Detection Unit page appears, displaying a confirmation message that states your new VDU has been created and saved.

5.9.2 Setting the Server Time Zone

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. Click **Administration > Server Properties**.

   The Server Properties page appears.

2. In the Server Time Zone field, search for and select the appropriate time zone.

   This is the time zone in which your database resides.

3. Click **Update**.

5.9.3 Defining Area Code and Time Zone Mapping Data

All calling target groups are validated before records can be dialed from the target group. As part of the validation process, the records within the target group must be mapped to a time zone, otherwise the records will be flagged as Do Not Use and will not be dialed. There are three different types of time zone mappings:

- Mapping a territory code to a time zone
- Mapping a territory code and area code to a time zone
- Mapping a territory code, area code and postal code to a time zone

As a rule, the use of territory code to time zone mapping requires the least amount of effort to create. However, certain countries are divided among different time zones, and therefore require area code, along w/ territory code to map to a time zone. If area code is insufficient, then postal code may also be used, however the postal code only needs to be defined when absolutely necessary in order to correctly determine a time zone.

Click the following links for detailed steps:

Creating Area Code Mappings

Creating Time Zone Mappings

5.9.3.1 Creating Area Code Mappings

An area code is defined as a 3-digit number that identifies each telephone service area in a country (such as the U.S. or Canada).

Area Code Mapping provides a way for Advanced Outbound to find the country to associate a phone number with.

Area code mappings for the US and CA are provided. However, if you are processing lists containing numbers in other countries (whose phone country code does not map uniquely to an area code code), you will need to create the area code mappings for those countries. If your list contains numbers in only one country, you can create rules defining the area code for the entire list, and do not need to create these mappings. Additionally, these mappings are used to associate regions (states/provinces) with area codes so that regions can be associated with contact points and used in applying Region Calling Calendars to determine when contact points can be called.

Use the steps below to create an area code mapping in Advanced Outbound.

Prerequisites:

In order to create area code mappings, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. Click the **Administration** tab.

   The Administration tab appears, displaying the Server Properties subtab page. This is the default page for the Administration tab.

2. From the Server Properties page, click the **Time Zone Mappings** subtab.

   The Area Code Mapping page appears, displaying a summary view table of all existing area code mappings.

3. On the Area Code Mapping page, click **Create Area Code Mapping**.

   The Create Area Code Mapping page appears.

4. In the Country Name field, click the flashlight icon.

   The Select a Country Name page appears.

5. From the Select a Country Name page, select a country name from the list.

   You return to the Area Code Mapping page. The selected Country Name appears in the Country Name field, and the Country Code field automatically populates with the pre-seeded country code for the selected country name.

6. In the Area Code field, enter an area code for the selected country.

7. Click **Create**.

   The Area Code Mapping page updates to reflect the new area code mapping.

5.9.3.2 Creating Time Zone Mappings

Advanced Outbound contains time zone mapping tables that must be defined.

> **Note:** It is the responsibility of the implementation team to populate the appropriate data into these tables. While Advanced Outbound provides the structure and mechanism to utilize this data, the data itself can be purchased through third party vendors.

Many countries only occupy a single time zone, but others are spread across multiple time zones. If your interaction center plans to make calls throughout countries (for example: United States or Canada) where many states and provinces fall in different time zones, you may need to provide the state/region postal codes and area codes to determine that Advanced Outbound is using the correct time zone for the customer. There are standard database load utilities readily available within the database that can be used to upload purchased data into the Advanced Outbound Schema.

In order to ensure that customers are called at the appropriate times, Advanced Outbound must know where the person resides in relation to time zones. This way Advanced Outbound can follow the appropriate telemarketing laws that govern calling in their particular country, state, country or city.

The time zone mapping form is used as an easy entry point to provide Advanced Outbound with a method to call customers or contacts.

At a minimum, the country code and time zone must be entered for each country that an interaction center will contact. It is mandatory that all countries map their time zone with their country name.

For single time zone countries, no further information is needed.

For countries with more than one time zone, it is recommended that you map the appropriate time zone, country code, and optional area code, postal code, state/region information to assist Advanced Outbound during list validation time. By utilizing the address specific information, Advanced Outbound can match a customer record with the appropriate time zone and country if their customer record is incomplete.

This functionality is especially important in countries where there are multiple time zones. For example, the United States has eight time zones spanning from Saipan, Northern Mariana Islands, U.S.A. (Standard time zone: UTC/GMT +10 hours where daylight savings time is currently not observed) to Honolulu, Hawaii, U.S.A. (Standard time zone: UTC/GMT -10 hours where daylight savings time is currently not observed). In addition, there are many states which have multiple time zones and may, or may not, participate in daylight savings time.

For example: the state of Indiana has up to three different time zones depending on the location in the state. In order to ensure we call the customer at the correct time, we need to know exactly where the customer is and follow the laws for their state. In this case, Advanced Outbound may need to go down to the postal code to ensure that the correct time zone is being used for the customer record.

Use the steps below to create a time zone mapping in Advanced Outbound.

Prerequisites:

In order to create time zone mappings, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. Click the **Administration** tab.

   The Administration tab appears, displaying the Server Properties subtab page. This is the default page for the Administration tab.

2. From the Server Properties page, click the **Time Zone Mappings** subtab.

The Area Code Mapping Detail page appears, displaying a summary view table of all existing area code mappings.

3. From the side navigation bar, click **Time Zone Mapping**.

   The Time Zone Mapping page appears, displaying a summary view table of all existing time zone mappings.

4. On the Time Zone Mapping page, click **Create Time Zone Mapping**.

   The Create Time Zone Mapping page appears.

5. In the Country Name field, click the flashlight icon.

   The Select a Country Name page appears.

   From the list of country names, select the country name to which you want to map a time zone.

6. From the drop-down list in the Area Code field, select an area code for the country name you selected in the previous step.

7. In the Postal Code field, type a postal code for the area code you selected in the previous step.

8. In the State/Region Field, type the appropriate state/region for the area code.

   Note: The format for the state/region should be the entire state/region name with initial capitalization (for example, Nevada).

9. In the Time Zone field, click the flashlight icon.

   The Select a Time Zone page appears, displaying a summary view table of all existing time zones.

10. From the Time Zone column of the summary view table, select the time zone to which you want to map the country code you selected.

11. Click **Create**.

    The mapping between the selected country code and time zone is created.

5.9.4 Defining Calling Calendars

A calling calendar defines a set of callable times. Calendars can be associated to geographic locations (countries or regions) or marketing objects (campaign schedules and target groups). Advanced Outbound utilizes three types of calendars:

- Country Calendar
- Region Calendars
- User Defined Calendar

This topic group contains the following topics:

Creating Country Calendars

Creating Holidays or Exceptions for Country Calendars

Creating Region Calendars

Creating Holidays or Exceptions for Region Calendars

Creating User Defined Calendars

Creating Holidays or Exceptions for User Defined Calendars

5.9.4.1 Creating Country Calendars

Country calendars consist of a baseline callable time range for all seven days of the week. Country calendars are expected to be created based on country-specific laws and are required for Advanced Outbound. Every list entry has one to many contact points. Every contact point (telephone number) must have an associated country code and time zone. Every country code must have an associated calendar; thus, country calendars are applied at the individual record level. This association creates the base set of callable times for every list entry. Advanced Outbound ships with country calendars for many countries; however, additional country calendars can be created and added to the base product as necessary to meet your business needs.

Unlike user defined calendars, you cannot delete or remove country calendars. You can only create and modify country calendars.

Use the steps below to create country calendars for Oracle Advanced Outbound.

Prerequisite:

In order to create country calendars, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. On the Campaign Schedules page, click the **Calling Calendars** tab.

   The calling calendars page appears, displaying a list of all existing country calendars. The Country Calendars page is the default view for the calling calendars page.

2. On the Country Calendars page, click **Create Calendar**.

   The Create Country Calendar page appears.

3. In the Calendar Name field on the Create Country Calendar page, type a name for the new country calendar.

   Note: Calendar names have a 64 character limit and only the following characters are supported:

   - A-Z
   - 0-9
   - underscore, space, and hyphen

   ---

4. From the drop-down list in the Country Name field, select the country you want to associate with the new country calendar.

5. You can create a country calendar by two different methods: you can copy and existing country calendar, or you can create a completely new country calendar. Click the appropriate radio button to select the method by which you will create the country calendar.

   a. To create a country calendar by using an existing country calendar as a model, click the **Copy Country Calendar** radio button and select the country you want to use from the drop-down list in the field next to the radio button.

   b. To create a completely new country calendar, click the **Create New Calendar** radio button.

6. Click **Create**.

   The Country Calendar Details page appears.

7. From the calendar, click the calendar region corresponding to the time you want the calendar to begin calling on the day you want to start calling (example - Monday at 9:00).

The Calendar Region Details page appears.

Note: To open to the Calendar Region Details page, you can click anywhere in the calendar; however, by clicking the day and time you want to begin calling, you automatically populate the week day and start time fields in the Calendar Region Details page. Also, by clicking the hyperlinked name of day, you can set the whole day for a single value, then copy this to any other day of the week.

---

8. From the drop-down list in the Region Type field, select **Callable** if you want to add callable hours, select **Not callable** if you want to add non-callable hours, or click **Not specified** if you want to add regions that are not designated as callable or noncallable.
9. In the Start Time Hour and Minute fields, if the start time has not automatically defaulted to the time you want the country calendar to begin taking effect, click the drop-down arrows in each field and select the hour and minute from the respective lists.

Note: All times in the Hour field are displayed in 24 hour format (0:00 - 24:00). The Minute field allows you to select between **00** (on the hour) and **30** (on the half-hour) time increments.

---

10. In the End Time Hour and Minute fields, click the drop-down arrows in each field and select the hour and minute from the respective lists. The end time is the time at which your country calendar will terminate calling.
11. In the Copy To area, select the days of the week to which you wish to copy this calling schedule (if any).

Note: Copying the calling schedule in this way is not required; however, if your calling schedule will not vary greatly between days of the week, this method provides a quick means to populate a baseline calling calendar. You can always go back to the individual days and modify the specific calling times.

---

12. Click **Apply**.

The country calendar is created and you return to the Country Calendar Details page.

5.9.4.2 Creating Holidays or Exceptions for Country Calendars

Use the steps below to create holidays or exceptions for country calendars in Oracle Advanced Outbound.

Prerequisite

To create holidays or exceptions for country calendars, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. On the Campaign Schedules page, click the **Calling Calendars** tab.

   The Country Calendars page appears, displaying a list of all existing country calendars. The Country Calendars page is the default view for the Calling Calendars page.

2. From the Calendar Name column, click the calendar name of the country calendar to which you want to add a holiday or exception.

   The Country Calendar Details page appears, displaying the calendar.

3. From the side panel on the Country Calendar Details page, click **Exception List**.

   The Holidays and Exceptions page appears, displaying a list of all existing holidays and exceptions for the selected country calendar.

4. In the Holidays and Exceptions page, click **Create Exception**.

   The Holiday and Exception Details page appears.

5. In the Exception Name field of the Holiday and Exception Details page, type a name for the holiday or exception you are creating.

6. In the Exception Type you can specify when you want the exception to occur. You can set an exception to happen on a given date each year, on a given date

once ever, or on a regularly occurring interval (example - first Monday in January).

c. To set the exception to occur on a specified date each year, click the top radio button, select the month from the list of months, and select the day from the list of days.

d. To set the exception to occur on a specified date once ever, click the middle radio button, select a month from the list of months, select a day from the list of days, and type a year in the final field.

e. To set the exception to happen at a regularly occurring interval, click the bottom radio button, select the interval time from the list in the first field, select the day of the week from the list in the middle field, and select the month from the list in the last field.

7. Click **Create**.

   The exception is created and you return to the Holiday and Exception Details page.

   Note: The Holiday and Exception Details page now displays an Exception Region area. You can use this area to define certain hours during the established calling calendar day you want the exception to override. The default is to override the entire day

   ---

8. If you only want the exception to override certain hours during the calling day, in the Exception Region area you can click the time region corresponding to the start time you want to set for the exception.

   The Calendar Region Details page appears.

9. From the list in the Region Type field, select **Callable** if you want to make the exception time period callable hours, or select **Not callable** if you want to make the exception time period non-callable hours.

10. In the Start Time Hour and Minute fields, if the start time has not automatically defaulted to the time you want the exception to begin overriding the calendar, select the hour and minute from the respective lists.

    Note: All times in the Hour field are displayed in 24 hour format (0:00 - 24:00). The Minute field allows you to select between **00** (on the hour) and **30** (on the half-hour) time increments.

Note: To open the Calendar Region Details page, you can click any time region in the Exception Region area; however, by clicking the time you want the exception to begin overriding the calendar, you automatically populate the start time fields in the Calendar Region Details page.

---

11. In the End Time Hour and Minute fields, select the hour and minute you want the exception to stop overriding the calendar.
12. Click **Apply**.

    You return to the Holiday and Exception Details page and a confirmation note will appear at the top of the page.

5.9.4.3 Creating Region Calendars

Use the steps below to create region calendars in Oracle Advanced Outbound.

Prerequisite

The regions you want to create in Oracle Advanced Outbound must already have been defined in Oracle Marketing Online. You must use the area code mapping feature in the Advanced Outbound HTML Administration Console's Administration tab (Advanced Outbound Administrator responsibility) to map these regions to territory code/area code pairs.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. On the Campaign Schedules page, click the **Calling Calendars** tab.

   The calling calendars page appears, displaying a list of all existing country calendars. The Country Calendars page is the default view for the calling calendars page.
2. On the Country Calendars page, click the **Region Calendars** subtab.

The Region Calendars page appears, displaying a list of all existing region calendars.

3. On the Region Calendars page, click **Create Calendar**.

   The Create Region Calendar page appears.

4. In the Calendar Name field, type a name for the new region calendar.
5. From the Region Name list, select the appropriate region.
6. You can create a user defined calendar by two different methods: you can copy an existing region calendar, or you can create a completely new region calendar.
   a. To create a user defined calendar by using an existing region calendar as a model, click **Copy region Calendar** and select the region calendar you want to use from the provided list.
   b. To create a completely new region calendar, click **Create New Calendar**.
7. Click **Create**.

   The Region Calendar Details page appears, displaying a calendar table with days of the week columns and hours of the day rows.

8. From the calendar table, click the appropriate region corresponding to the time and day you want to start calling (example - Monday at 9:00).

   The Calendar Region Details page appears.

   Note: To open to the Calendar Region Details page, you can click anywhere in the calendar; however, by clicking the day and time you want to begin calling, you automatically populate the week day and start time fields in the Calendar Region Details page.

9. From the list in the Region Type field, select **Callable** if you want to add callable hours, or select **Not callable** if you want to override a callable region.
10. In the Start Time Hour and Minute fields, if the start time has not automatically defaulted to the time you want the region calendar to begin taking effect, select the hour and minute from the respective lists.

    Note: All times in the Hour field are displayed in 24 hour format (0:00 - 24:00). The Minute field allows you to select between **00** (on the hour) and **30** (on the half-hour) time increments.

11. In the End Time Hour and Minute fields, select the hour and minute from the respective lists. The end time is the time at which your region calendar will terminate and the default callable hours on the country calendar will resume.

12. In the Copy To area, select the days of the week to which you wish to copy this calling schedule (if any).

> **Note:** Copying the calling schedule in this way is not required; however, if your calling schedule will not vary greatly between days of the week, this method provides a quick means to populate a baseline calling calendar. You can always go back to the individual days and modify the specific calling times.

13. Click **Apply**.

    The region calendar is created and you return to the Region Calendar Details page.

14. In the Override Country Calendar field, select **Yes**, or **No** from the list.

> **Note:** You must select **Yes** to execute the region calendar. If you select **No**, the region calendar will still be created, but it will not alter or expand upon the calling hours of the existing country calendar.

15. Click **Update**.

    If you selected **Yes**, the Update Region Calendar Confirmation page appears, displaying a warning that overriding the country calendar will cause all users of this calendar to ignore any country specific restrictions, and you must click Apply to complete the override. If you selected **No**, The Region Calendar Details page refreshes with the selected calling schedule.

5.9.4.4 Creating Holidays or Exceptions for Region Calendars

Use the steps below to create holidays or exceptions for region calendars in Oracle Advanced Outbound.

Prerequisite

The regions you want to create in Oracle Advanced Outbound must already have been defined in Oracle Marketing Online. You must use the area code mapping feature in the Advanced Outbound HTML Administration Console's Administration tab (Advanced Outbound Administrator responsibility) to map these regions to territory code/area code pairs.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. On the Campaign Schedules page, click the **Calling Calendars** tab.

   The calling calendars page appears, displaying a list of all existing country calendars. The Country Calendars page is the default view for the calling calendars page.

2. On the Country Calendars page, click the **Region Calendars** subtab.

   The Region Calendars page appears, displaying a list of all existing region calendars.

3. From the Calendar Name column, click the calendar name of the region calendar to which you want to add a holiday or exception.

   The Region Calendar Details page appears, displaying the calendar.

4. From the side panel on the Region Calendar Details page, click **Exception List**.

   The Holidays and Exceptions page appears, displaying a list of all existing holidays and exceptions already added to the selected region calendar (if any).

5. On the Holidays and Exceptions page, click **Create Exception**.

   The Holiday and Exception Details page appears.

6. In the Exception Name field, type a name for the holiday or exception you are creating.

7. In the Exception Type area, you can specify when you want the exception to occur. You can set an exception to happen on a given date each year, on a given date once ever, or on a regularly occurring interval (example - first Monday in January).

a. To set the exception to occur on a specified date each year, click the top radio button, select the month from the list of months, and select the day from the list of days.

b. To set the exception to occur on a specified date once ever, click the middle radio button, select a month from the list of months, select a day from the list of days, and type a year in the final field.

c. To set the exception to happen at a regularly occurring interval, click the bottom radio button, select the interval time from the list in the first field, select the day of the week from the list in the middle field, and select the month from the list in the last field.

8. Click **Create**.

The exception is created and you return to the Holiday and Exception Details page.

> **Note:** The Holiday and Exception Details page now displays an Exception Region area. You can use this area to define certain hours during the established calling calendar day you want the exception to override. The default is to override the entire day

9. If you only want the exception to override certain hours during the calling day, in the Exception Region area you can click the time region corresponding to the start time you want to set for the exception.

The Exception Region Details page appears.

10. From the list in the Region Type field, select **Not Callable**.

11. In the Start Time Hour and Minute fields, if the start time has not automatically defaulted to the time you want the exception to begin overriding the calendar, select the hour and minute from the respective lists.

> **Note:** All times in the Hour field are displayed in 24 hour format (0:00 - 24:00). The Minute field allows you to select between **00** (on the hour) and **30** (on the half-hour) time increments.

> **Note:** To open the Calendar Region Details page, you can click any time region in the Exception Region area; however, by clicking the time you want the exception to begin overriding the calendar, you automatically populate the start time fields in the Calendar Region Details page.

12. In the End Time Hour and Minute fields, select the hour and minute you want the exception to stop overriding the calendar.
13. Click **Apply**.

    You return to the Holiday and Exception Details page and a confirmation note will appear at the top of the page.

5.9.4.5 Creating User Defined Calendars

User Defined calendars are optional calendars which can be associated with either campaign schedules or lists. These calendars are used to override information in the country calendar; however, user defined calendars don't automatically override country calendars. To begin overriding a country calendar, you must select **Yes** from the drop down list in the Override Country Calendar field on the User Defined Calendar Details page for the selected user defined calendar. These calendars allow you to specify calling times outside of the calling time parameters contained in the standard country calendar you are using.

For example, the default calling time in the country calendar you are using is 8AM to 9PM; however, you are only calling businesses and you know that nobody will be present after 6PM. You can create a User Defined calendar that adjusts the call time accordingly.

Use the steps below to create user defined calendars for Oracle Advanced Outbound.

Prerequisite:

In order to create user defined calendars, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. On the Campaign Schedules page, click the **Calling Calendars** tab.

   The calling calendars page appears, displaying a list of all existing country calendars. The Country Calendars page is the default view for the calling calendars page.

2. On the Country Calendars page, click the **User Defined Calendars** subtab.

   The User Defined Calendars page appears, displaying a list of all existing user defined calendars.

3. On the User Defined Calendars page, click **Create Calendar**.

   The Create User Defined Calendar page appears.

4. On the Create User Defined Calendar page, type a name for the new user defined calendar.

5. You can create a user defined calendar by three different methods: you can copy and existing country calendar, you can copy and existing user defined calendar, or you can create a completely new user defined calendar. Click the appropriate radio button to select the method by which you will create the user defined calendar.

   a. To create a user defined calendar by using an existing country calendar as a model, click the **Copy Country Calendar** radio button and select the country you want to use from the drop-down list in the field next to the radio button.

   b. To create a user defined calendar by using an existing user defined calendar, click the **Copy User Defined Calendar** radio button and select which existing user defined calendar you want to use from the drop-down list in the field next to the radio button.

   c. To create a completely new user defined calendar, click the **Create New Calendar** radio button.

6. Click **Create**.

   The User Defined Calendar Details page appears.

7. From the calendar, click the calendar region corresponding to the time you want the calendar to begin calling on the day you want to start calling (example - Monday at 9:00).

   The Calendar Region Details page appears.

   > **Note:** To open to the Calendar Region Details page, you can click anywhere in the calendar; however, by clicking the day and time you want to begin calling, you automatically populate the week day and start time fields in the Calendar Region Details page.

8. From the drop-down list in the Region Type field, select **Callable** if you want to add callable hours to the default country calendar, select **Not callable** if you want to override a callable region on the country calendar, or click **Not specified** if you do not want to change the particular callable region on the country calendar.
9. In the Start Time Hour and Minute fields, if the start time has not automatically defaulted to the time you want the user defined calendar to begin taking effect, click the drop-down arrows in each field and select the hour and minute from the respective lists.

   > **Note:** All times in the Hour field are displayed in 24 hour format (0:00 - 24:00). The Minute field allows you to select between **00** (on the hour) and **30** (on the half-hour) time increments.

10. In the End Time Hour and Minute fields, click the drop-down arrows in each field and select the hour and minute from the respective lists. The end time is the time at which your user defined calendar will terminate and the default callable regions on the country calendar will resume.
11. In the Copy To area, select the days of the week to which you wish to copy this calling schedule (if any).

   > **Note:** Copying the calling schedule in this way is not required; however, if your calling schedule will not vary greatly between days of the week, this method provides a quick means to populate a baseline calling calendar. You can always go back to the individual days and modify the specific calling times.

12. Click **Apply**.

    The user defined calendar is created and you return to the User Defined Calendar Details page.

13. In the Override Country Calendar field on the User Defined Calendar Details page, select **Yes**, or **No** from the drop-down list.

    Note: You must select **Yes** to execute the user defined calendar. If you select **No**, the user defined calendar will still be created, but it will not alter or expand upon the calling hours of the existing country calendar.

    ---

14. Click **Update**.

    The Update User Defined Calendar Conformation page appears, warning you that overriding the country calendar will cause all users of this calendar to ignore any country specific restrictions.

15. Click **Apply** to override the country calendar with the user defined calendar.

    The user defined calendar is created and you return to the User Defined Calendar Details page.

5.9.4.6 Creating Holidays or Exceptions for User Defined Calendars

Use the steps below to create holidays or exceptions for user defined calendars in Oracle Advanced Outbound.

Prerequisite

To create holidays or exceptions for user defined calendars, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. On the Campaign Schedules page, click the **Calling Calendars** tab.

The Country Calendars page appears, displaying a list of any existing country calendars. The Country Calendars page is the default view for the calling calendars tab.

2. On the Country Calendars page, click the **User Defined Calendars** subtab.

   The User Defined Calendars page appears, displaying a summary view table of all existing user defined calendars.

3. From the Calendar Name column, click the calendar name of the user defined calendar to which you want to add a holiday or exception.

   The User Defined Calendar Details page appears, displaying the calendar.

4. From the side panel on the User Defined Calendar Details page, click **Exception List**.

   The Holidays and Exceptions page appears, displaying a list of all existing holidays and exceptions for the selected user defined calendar.

5. In the Holidays and Exceptions page, click **Create Exception**.

   The Holiday and Exception Details page appears.

6. In the Exception Name field of the Holiday and Exception Details page, type a name for the holiday or exception you are creating.

7. In the Exception Type you can specify when you want the exception to occur. You can set an exception to happen on a given date each year, on a given date once ever, or on a regularly occurring interval (example - first Monday in January).

   d. To set the exception to occur on a specified date each year, click the top radio button, select the month from the list of months, and select the day from the list of days.

   e. To set the exception to occur on a specified date once ever, click the middle radio button, select a month from the list of months, select a day from the list of days, and type a year in the final field.

   f. To set the exception to happen at a regularly occurring interval, click the bottom radio button, select the interval time from the list in the first field, select the day of the week from the list in the middle field, and select the month from the list in the last field.

8. Click **Create**.

   The exception is created and you return to the Holiday and Exception Details page.

Note: The Holiday and Exception Details page now displays an Exception Region area. You can use this area to define certain hours during the established calling calendar day you want the exception to override. The default is to override the entire day

---

9. If you only want the exception to override certain hours during the calling day, in the Exception Region area you can click the time region corresponding to the start time you want to set for the exception.

   The Exception Region Details page appears.

10. From the list in the Region Type field, select **Not Callable**.

11. In the Start Time Hour and Minute fields, if the start time has not automatically defaulted to the time you want the exception to begin overriding the calendar, select the hour and minute from the respective lists.

Note: All times in the Hour field are displayed in 24 hour format (0:00 - 24:00). The Minute field allows you to select between **00** (on the hour) and **30** (on the half-hour) time increments.

Note: To open the Calendar Region Details page, you can click any time region in the Exception Region area; however, by clicking the time you want the exception to begin overriding the calendar, you automatically populate the start time fields in the Calendar Region Details page.

---

12. In the End Time Hour and Minute fields, select the hour and minute you want the exception to stop overriding the calendar.

13. Click **Apply**.

    You return to the Holiday and Exception Details page and a confirmation note will appear at the top of the page.

5.9.5 Creating Recycling Algorithms

Recycling is the process of determining how to process records that have been dialed. When a record is returned, a user-definable recycling algorithm is executed, which looks at the record, the call results, and previous calls to the record.

When creating a recycling algorithm, you must first decide whether you will use an existing algorithm as a model for your new one, or whether you want to create a completely new algorithm. If an existing algorithm contains relatively similar pre or post-processing actions, conditions or sub-conditions, you should use it as a basis for your new algorithm. The Advanced Outbound HTML Administration console allows you to do this by permitting you to copy existing algorithms. If your new algorithm will be significantly different from any existing ones, you should create a completely new algorithm.

You must then add or modify pre or post-processing actions (not required), or the conditions or sub-conditions for the algorithm. You then need to add an action for each condition or sub-condition. These actions will determine how the record is handled if the condition or sub-condition under which you add it is met.

Important: Each condition or sub-condition must have an associated action or you will receive an error.

There are two ways to create a recycling algorithm:

- by copying an existing recycling algorithm
- by creating a completely new recycling algorithm

You can also use the recycling shadow feature, add pre and post-processing actions, add conditions, or add actions performed if no sub-conditions are met to the algorithm:

Using the Recycling Algorithm Shadow Feature

Adding Pre or Post-Processing Actions

Adding Algorithm Conditions

Adding Actions Performed if No Sub-Conditions Are Met

5.9.5.1 Creating Recycling Algorithms by Copying an Existing Algorithm

Use the steps below to create recycling algorithms by copying existing algorithms in Oracle Advanced Outbound.

Prerequisite:

In order to create recycling algorithms, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. On the Campaign Schedules page, click the **Algorithms** tab.

   The Recycling Algorithms page appears, displaying a list of all existing recycling algorithms. The Recycling Algorithm page is the default view for the algorithms page.

2. On the Recycling Algorithms page, click **Create Recycling Algorithm**.

   The Create Recycling Algorithm page appears.

3. On the Create Recycling Algorithm page, type a name for the new recycling algorithm in the Algorithm Name field.

   Note: Algorithm names have a 64 character limit and only the following characters are supported:

   - A-Z
   - 0-9
   - underscore, space, and hyphen

   ---

4. Click the **Copy From Existing Algorithms** radio button and from the drop-down list in the provided field, select the existing algorithm you want to copy.

5. Click **Create**.

   The new recycling algorithm is created.

   The Recycling Algorithm page appears, displaying the summary view of the algorithm conditions.

5.9.5.2 Creating Completely new Recycling Algorithms

Use the steps below to create completely new recycling algorithms in Oracle Advanced Outbound.

Prerequisite:

In order to create recycling algorithms, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. On the Campaign Schedules page, click the **Algorithms** tab.

   The Algorithms page appears, displaying a list of all existing recycling algorithms. The Recycling Algorithm page is the default view for the algorithms page.

2. On the Algorithms page, click **Create Recycling Algorithms**.

   The Recycling Algorithm Creation page appears.

3. On the Recycling Algorithm Creation page, type a name for the new recycling algorithm in the Algorithm Name field.

   Note: Algorithm names have a 64 character limit and only the following characters are supported:

   - A-Z
   - 0-9
   - underscore, space, and hyphen

   ---

4. Click the **Create New Algorithm** radio button and from the drop-down list in the Select Source Type field, select the source type you want to use.

Note: Source types define how fields from the database (typically TCA) map to the columns of a list entry.

Oracle Advanced Outbound recycling algorithms are directly associated to source types because they define which fields are present in a list.

Oracle Advanced Outbound supports two source types:

- B to B - Business to Business (Organization Contacts)
- B to C - Business to Consumer (Persons)

5. Click **Create**.

   The new recycling algorithm is created.

   The Recycling Algorithm Detail page appears, displaying the summary view of the algorithm conditions. Since this is a new algorithm, no existing pre or post-processing actions, or algorithm conditions should be displayed.

5.9.5.3 Using the Recycling Algorithm Shadow Feature

Advanced Outbound automatically creates a duplicate, or shadow, version of each recycling algorithm. This shadow version is displayed to the right of the original or "live" version on the Recycling Algorithm Detail page. You can use the shadow version to make changes to or manipulate the recycling algorithm without affecting the original. Once you are satisfied with your changes, you can click **Replace** to apply the changes to the original version.

Caution: Before you click Replace, ensure your modified recycling algorithm is valid and will not generate errors. Once you click **Replace** and overwrite the original recycling algorithm, you cannot retrieve the original algorithm.

5.9.5.4 Adding Pre or Post-Processing Actions

Recycling algorithms utilize pre and post-processing actions to determine what happens to records before and after (respectively) the conditions apply.

Use the steps below to add pre or post-processing actions to existing recycling algorithms in Oracle Advanced Outbound.

Prerequisite:

In order to add pre or post-processing actions, your user account must be assigned the Advanced Outbound Administrator responsibility. You must also have an existing algorithm, to which you can add the pre or post-processing actions.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. On the Campaign Schedules page, click the **Algorithms** tab.

   The Algorithms page appears, displaying a list of all existing recycling algorithms. The Recycling Algorithm page is the default view for the algorithms page.

2. From the list of existing recycling algorithms, click the algorithm name of the algorithm to which you want to add pre or post-processing actions.

   The Recycling Algorithm Detail page appears, displaying a summary view of all the existing pre and post-processing actions and all the existing conditions.

3. From the Recycling Algorithm Detail page, click **Pre-Processing Action(s)** to add pre-processing actions, or **Post-Processing Action(s)** to add post-processing actions.

   The Edit Recycling Algorithm Action page appears, displaying a summary view table for pre or post-processing actions (depending on what you clicked in step 4).

4. From the Action column of the summary view table, click the drop-down arrow and select the action you want to add and click **Update**.

   > **Note:** Some actions require you to enter further information. The actions that require additional information have "**...**" after their name in the drop-down list. If the action you selected requires additional information, when you click **Update**, additional fields will appear, in which you need to enter information. Once you have entered the necessary additional information, click **Update**.

The selected action is added and the summary view table updates to show the new action.

5.9.5.5 Adding Algorithm Conditions

Conditions and sub-conditions determine how the algorithm processes records that have been dialed. Conditions and sub-conditions are composed of three parts:

- A condition
- An operator
- A value

To avoid confusion, since the first component of the algorithm condition being added is also called a condition, we refer to the entire statement (condition, operator, and value) as a condition statement for the purposes of this guide. Condition statements are structured in the following order: *condition operator value.* For example: *STATUS contains ACTIVE* (where *STATUS* is the condition, *contains* is the operator, and *ACTIVE* is the value), or: *HOUSEHOLD_SIZE greater than 3* (where *HOUSEHOLD_SIZE* is the condition, *greater than* is the operator, and *3* is the value).

The Oracle Advanced Outbound HTML Administration console displays conditions and their sub-conditions in a treeview model.

Example:

Condition 1

    Sub-condition 1

    Sub-condition 2

Condition 2

    Sub-condition 1

In the above example, Condition 1 and Condition 2 are top level conditions. If you want to have more than one expression in a single condition, it is very important how the expressions are joined (by AND or by OR).

If you want to have multiple top level conditions in your recycling algorithm, their order is very important. Once a condition is met, Oracle Advanced Outbound ignores all other conditions at the same level and only completes execution for the process within that condition block. In the above example, if Condition 1 is met, then Condition 2 (and Sub-condition 1 under Condition 2) will be ignored.

Use the steps below to add algorithm conditions (expressions) to existing recycling algorithms in Oracle Advanced Outbound.

Prerequisite:

In order to add algorithm conditions, your user account must be assigned the Advanced Outbound Administrator responsibility. You must also have an existing algorithm, to which you can add the conditions.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. On the Campaign Schedules page, click the **Algorithms** tab.

   The Algorithms page appears, displaying a list of all existing recycling algorithms. The Recycling Algorithm page is the default view for the algorithms page.

2. From the list of existing recycling algorithms, click the algorithm name of the algorithm to which you want to add conditions.

   The Recycling Algorithm Detail page appears, displaying a summary view of all the existing pre and post-processing actions and all the existing conditions.

   > **Note:** If this is a new algorithm, the summary view will not contain any actions or conditions.

3. From the Recycling Algorithm Detail page:

   - Click **Root** to add a top level condition.
   - Click **Condition** for the condition statement to which you want to add a sub-condition.

   The Recycling Algorithm Condition Details page appears, displaying two areas:

   - a Sub-Conditions area
   - an Actions if no sub-condition met area

4. Under the Sub-Conditions heading, click **Insert Condition**.

   The Edit Recycling Algorithm Condition page appears, displaying a summary view table for algorithm conditions.

5. From the Expression column, click the drop-down arrow and select the condition you want from the list and click **Update**.

   The Expression column expands with additional fields, to allow you to enter the operator and value for the condition.

6. From the drop-down field in the Expression column (directly after the condition statement), select the operator you want to use for your expression.

7. From the last drop-down field in the Expression column, select the value you want to use for your expression and click **Update.**

   The summary view table updates to show your new expression.

Note: If you want to add multiple expressions to the condition statement, repeat steps 3-7 in the next set of fields below the ones for your current expression, but remember to select how you want the expressions joined from the drop-down list in the Expressions Joined By field before clicking **Update**.

Note: If you want to add additional conditions, repeat steps 5-7 for each additional condition.

5.9.6 Adding Actions Performed if no Sub-Conditions Are Met

Use the steps below to add actions if no sub-conditions are met to existing algorithm conditions or sub-conditions in Oracle Advanced Outbound.

Prerequisite

To add actions if no sub-condition is met, your user account must be assigned the Advanced Outbound Administrator responsibility. You must also have an existing algorithm, to which you can add the actions.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. On the Campaign Schedules page, click the **Algorithms** tab.

   The Recycling Algorithms page appears, displaying a list of all existing recycling algorithms. The Recycling Algorithm page is the default view for the algorithms page.

2. From the list of existing recycling algorithms, click the algorithm name of the algorithm to which you want to add conditions.

   The Recycling Algorithm Detail page appears, displaying a summary view of all the existing pre and post-processing actions and all the existing conditions.

   > **Note:** If this is a new algorithm, the summary view will not contain any actions or conditions.

3. From the Recycling Algorithm Details page, click **Root** (if you want to add actions to a top level condition), or click **Condition:** for the condition under which the sub-condition to which you want to add an action resides.

   The Recycling Algorithm Condition Details page appears, displaying two areas:

   - a Sub-Conditions area
   - an Actions if no sub-condition met area

4. Under the Actions if no sub-condition met field, click **Insert Action**.

   The Edit Recycling Algorithm Action page appears, displaying a summary view table for actions.

5. From the Action column of the summary view table, select the action you want to add and click **Update**.

   > **Note:** Some actions require you to enter further information. The actions that require additional information have "**...**" after their name in the list. If the action you selected requires additional information, when you click **Update**, additional fields will appear, in which you need to enter information. Once you have entered the necessary additional information, click **Update**.

The selected action is added and the summary view table updates to show the new action.

5.9.7 Creating Record Filters

Record filters are filters against which records are checked at the point of release. Record filters are created and applied to lists. They are able to check fields of list entries. Record filters check release fields to ensure they match defined parameters (STATE equal to Virginia). A match here will prevent the release of the record.

Use the steps below to create record filters in Oracle Advanced Outbound.

Prerequisite:

In order to create record filters, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. On the Campaign Schedules page, click the **Algorithms** tab.

   The Algorithms page appears, displaying a list of all existing recycling algorithms. The Recycling Algorithm page is the default view for the algorithms page.

2. On the Algorithms page, click the **Record Filters** subtab.

   The Record Filters page appears, displaying a list of the existing record filters.

3. On the Record Filters page, click **Create Record Filter**.

   The Create New Record Filter page appears.

4. In the Name field, type a name for the new record filter.

Note: Record filter names have a 64 character limit and only the following characters are supported:

- A-Z
- 0-9
- underscore, space, and hyphen

---

5. In the Select Source Type field, click the drop-down arrow and select the source type you want to use.

Note: Source types define how fields from the database (typically TCA) map to the columns of a list entry.

Oracle Advanced Outbound recycling algorithms are directly associated to source types because they define which fields are present in a list.

Oracle Advanced Outbound supports two source types:

- B to B - Business to Business (Organization Contacts)
- B to C - Business to Consumer (Persons)

Note: You can click **Clear** to delete the algorithm name and selected source type.

---

6. Click **Next**.

   The Record Filter Rules page appears.

7. On the Record Filter Rules page, click **Insert Rule**.

   The Record Filter Create Rule page appears, displaying a summary view table for record filter conditions.

Note: If this is a new record filter, the summary view will not contain any record filters.

---

8. From the Field column, type the name of the record field against which you want to run the record filters.
9. From the Operator column, click the drop-down arrow and select the operator you want to use in your record filters from the list.
10. From the Value field, type the value you want to use for your record filters.
11. Click **Create**.

    The Record Filter Edit Rule page updates to display a confirmation note, stating that the record filter rule was created successfully.
12. If you want to add additional expressions to the same condition: repeat steps 8-11 in the next set of fields below the current expression, and click **Create**.
13. If you want to add additional conditions to the same rule:
    a. From the drop-down list in the Add field, select the number of additional conditions you want to add, and click **Go**.

       The Record Filter Create Rule page updates to display a second summary view table, in which you can create additional conditions for the record filter rule.
    b. Repeat steps 8-11 (in the new summary view table fields), and click **Create**.
14. Click **Done**.

    The Record Filter Rules page appears, displaying the new rule(s).

5.9.8 Creating Validation Rules

Validation rules allow you to make exceptions to the automatic list validation process. For example, you can use validation rules when you don’t know the country code or time zone, but you know you will be dialing calls in a certain time zone. If the country code or time zone is not known these records will fail the list validation process and will not be dialed. You can set a validation rule to allow you to dial these records because you are confident of what is in the list. By doing this, you can prevent these calls from failing the list validation process, and thereby not being dialed.

For a complete list of the current validation rules and a description for each, refer to the Validation Rules concept.

Use the steps below to create validation rules in Oracle Advanced Outbound.

Prerequisite:

In order to create validation rules, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. On the Campaign Schedules page, click the **Algorithms** tab.

   The Algorithms page appears, displaying a list of all existing recycling algorithms. The Recycling Algorithm page is the default view for the algorithms page.

2. Click the **Validation Rules** subtab.

   The Validation Rules page appears, displaying a summary view table of all existing validation rules.

3. Click **Create**.

   The Create Validation Rule page appears.

4. On the Create Validation Rule page, type a name for the validation rule in the Rule Name field and click **Create**.

   Note: Rule names have a 64 character limit and only the following characters are supported:

   - A-Z
   - 0-9
   - underscore, space, and hyphen

   The Validation Rule Details page appears.

5. On the Validation Rule Details page, click **Insert Action**.

   The Edit Validation Rule Actions page appears, displaying a summary view table of all existing validation actions.

Note: If this is a new validation rule, the summary view will not contain any actions.

---

6. From the drop-down list in the action column, select the action you want to use for your validation rule, and click **Update**.

Note: Some actions require you to enter further information. The actions that require additional information have "**...**" after their name in the drop-down list. If the action you selected requires additional information, when you click **Update**, additional fields will appear, in which you need to enter information. Once you have entered the necessary additional information, click **Update**.

The selected action is added and the summary view table updates to show the new action.

5.9.9 Defining Campaign Schedule Parameters

The Campaign Schedule page displays a list of campaign schedules that have been targeted for executed in the interaction center. This process allows you to configure the call center specific parameters for the selected campaign schedule.

The column labeled Interaction Center Ready will indicate whether all the necessary parameters have been defined/setup for the campaign schedule in order to begin campaign schedule execution.

Note: You can only configure parameters for campaign schedules you create.

Use the steps below to configure campaign schedules for interaction center execution.

Prerequisite:

In order to campaign schedules for interaction center execution, your user account must be assigned the Advanced Outbound Administrator responsibility.

It is assumed that the user identified in Marketing Online's Market Medium setup has logged in to his Personal Homepage and has 'Approved' the campaign for execution.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. From the View field, select **My Campaign Schedules** to define the parameters for a campaign schedule you created in Oracle Marketing Online.
2. From the Name column of the summary view table on the Campaign Schedules page, click the name of the campaign schedule you want to configure for interaction center execution.

   > **Note:** If you do not see the desired campaign schedule displayed, check Oracle Marketing Online to ensure the campaign schedule is configured properly.

   The Call Center Campaign Schedule Details page appears, displaying a Call Center Parameters area and a Predictive Telephony Parameters area.
3. From the drop-down list in the Calendar field, select the user defined calendar you want to associate with the selected campaign schedule.

   > **Note:** If predictive dialing will not be used, click **Update** after selecting the user defined calendar.

4. Click the CTI Disabled checkbox, if your Campaign Schedule is not CTI enabled.

   Checking this box disables computer telephony for the selected campaign schedule. With CTI disabled, only manual dialing is allowed.
5. Click the On Hold checkbox, if you wish to place your Campaign Schedule on hold.

Note: Only Campaign Schedules with a status of **Active** can be placed on hold.

---

6. In the fields listed under the Predictive Telephony Parameters area, supply the following information:

Note: You only need to enter information in the Predictive Telephony Parameters fields if the campaign schedule will use predictive dialing.

---

   a. In the Predictive Dialing Timeout field, type the number of seconds you want to wait before a predictive dial times out.

Note: Valid values are between 15 and 45 seconds.

---

   b. From the drop-down list in the Ring-No-Answer field, select the number of rings you want to allow before Advanced Outbound registers the call attempt as a RNA (Ring No Answer).

   c. From the drop-down list in the Targeted Abandonment Rate field, select the maximum acceptable percentage for abandoned calls. If a dial is placed and a live voice is detected, but there is no agent available, the call is abandoned.

   d. From the drop-down lists in the Special Intercept Tones summary view table, select whether to recycle or have the agent manually handle the following types of special intercept tones: Reorder Handling, Intercept Handling, Vacant Handling, and Network Busy Handling.

   e. From the drop-down list in the Answering Machine Detection field, select the method by which the system detects answering machines, or select no answering machine detection.

Note: Selecting **No answer machine detection** will cause Advanced Outbound to forward answering machine calls to agents as live connections.

---

f. From the drop-down list in the Answering Machine Handling field, select how you want the call attempt handled if an answering machine is detected.

g. If you selected **Message** in the previous step, select the phone type and the message you want to play from the drop-down fields on the summary view table under the Answering Machine Handling field. Otherwise go to step h.

h. From the drop-down list in the Front Hold Message field, select whether or not you want to enable or disable Front Hold Messages.

Note: A front hold message is a message that is played when a live voice is detected, but an agent is not available to take a call. The message should persuade the customer to hold until an agent is available. Enabling front hold messaging will place the call on a front hold queue if no agents are available to take the call.

---

i. If you selected **Enable** in the previous step, select the phone type and message you want to play from the drop-down fields on the summary view table under the Front Hold Message field. Otherwise, go to step 7.

7. Click **Update**.

You return to the Call Center Campaign Schedule Details page and a confirmation note is displayed, stating that the configuration was successful.

5.9.10 Defining Target Group Parameters

Use the steps below to define the parameters necessary to setup a target group for outbound calling.

Prerequisite:

In order to modify the configuration of campaign schedules for interaction center execution, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. From the View field, select **My Campaign Schedules** to define the parameters for a campaign schedule you created in Oracle Marketing Online.
2. From the Name column of the summary view table on the Campaign Schedules page, click the name of the campaign schedule containing the target group on which you want to modify the configuration.

   The Call Center Campaign Schedule Details page appears, displaying a Call Center Parameters area and a Predictive Telephony Parameters area.
3. From the side navigation bar, click **Campaign Schedule Target Groups**.

   The Interaction Center Campaign Schedule Target Groups page appears, displaying a summary view table of the target group associated to the selected campaign schedule.
4. From the Name column of the summary view table, click the name of the target group for which you want to configure dialing parameters.

   The Interaction Center Campaign Schedule Target Group Details page appears.
5. From the drop-down list in the Dialing Method field, select the dialing method to use for the target group, or select to default to the campaign schedule's dialing method.
6. From the drop-down list in the Target Group Priority field, select the priority you want to assign the target group.

   > **Note:** Priorities determine the relative priority of a target group or subset in comparison to other target groups and subsets.
   >
   > Highest through Medium level priorities are preemptive; all target groups with priorities in this range will be exhausted in priority sequence before the next priority level is used. Low and Lowest priorities are used in round-robin fashion; each of these target groups will release its quantum of records, then the next target group in the same priority level will be used.
   >
   > At this time, Oracle Marketing Online does not support multiple target groups.

7. From the drop-down list in the Recycling Algorithm field, select the recycling algorithm you want to use for the target group.

8. From the drop-down list in the Record Filter field, select a record filter rule to use with the target group.
9. From the drop-down list in the Validation Rule field, select a validation rule to use with the target group.
10. From the drop-down list in the Calendar field, select a user defined calendar to use with the target group.
11. From the drop-down list in the Release Strategy field, select a release strategy to use with the target group.

> **Note:** The quantum release strategy supports proportional calling across all target groups and subsets associated with the campaign strategy and it is considered the baseline strategy for an Advanced Outbound service. This means that when Advanced Outbound is distributing customer records to agents, it releases a quantum number of records from each target group or subset before it goes on to the next target group or subset in the campaign.
>
> The Quota Release Strategy stops releasing records from a target group or subset when a pre-defined limit has been reached. This strategy disburses records from a target group or subset based on the quota that is assigned to a target group or subset.

12. Depending on your selection in the previous step, type the number of records you want to set as your limit in either the Quantum or Quota field.

> **Note:** If you selected **Quota** in step 11, you must select the hour and minute reset period from the drop-down list in each respective field. These fields specify the hours and minutes before the quota value is reset to zero (0).

13. Click **Update**.

    The Interaction Center Campaign Schedule Target Group Details pages updates to reflect the new dialing parameters and displays a confirmation stating that the dialing parameters have been configured successfully.

5.9.11 Defining Automated Messaging

What you are actually doing in this topic is importing a pre-recorded message and configuring it for use by Advanced Outbound.

Note: Messages must be recorded into a .wav or .vox file using an external utility (these programs come with all modern operating systems). The messages are then imported into the database and associated to campaign schedules using the Advanced Outbound administrative interface.

Use the steps below to create messages in Oracle Advanced Outbound.

Prerequisite

In order to create messages, your user account must be assigned the Advanced Outbound Administrator responsibility.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. On the Administrator UI login screen, type your admin level User ID and Password in the provided fields and click **Go**.

   The Advanced Outbound Administration UI appears, displaying the Campaign Schedules page.

2. On the Campaign Schedules page, click the **Telephony** tab.

   The Telephony page appears, displaying a summary view table of all existing VDUs. The Voice Detection Unit subtab page is the default view for the Telephony page.

3. On the Voice Detection Unit page, click the **Voice Messages** subtab.

   The Voice Messages page appears, displaying a summary view table of all existing messages.

4. On the Voice Messages page, click **Create Voice Message**.

The Create Voice Messages page appears.

5. In the Message Name field, type a name for the message.

> **Note:** Message names have a 64 character limit and only the following characters are supported:
>
> - A-Z
> - 0-9
> - underscore, space, and hyphen

6. In the description field, type a description of the message.
7. From the drop-down list in the Message Type field, select if the message will be an answering machine message or a front hold message.
8. From the drop-down list in the Format field, select the message format.

> **Note:** Oracle Advanced Outbound supports the following message formats:
>
> - 11Khz, 8Bit wav files
> - 8Khz, 8Bit wav files
> - 6Khz, 8Bit wav files
> - vox files

9. In the File Name field, click **Browse**.

   A browse dialog box opens, allowing you to browse your local drives or the network to find the message file you want.

10. Once you have located the file, select it and click **Open**.

    The selected file name appears in the File Name field.

11. Click **Create**.

    The Voice Messages page appears displaying a confirmation message stating that the message has been created successfully and the new message is displayed in the summary view table.

5.10 Configuring Oracle Universal Work Queue

What you are doing in this task is configuring Oracle Universal Work Queue to launch the desired Oracle business applications desktop interface. To do so, you select seeded classifications. These classifications are mapped to an application window or interface based on a particular media type. When an agent is requests delivery of that media type, the mapped business application is launched.

This setup is necessary to configure the application that needs to be popped, or launched, for an outbound media item. To configure a media screen pop for the UWQ Desktop, you must configure the media actions for Advanced Outbound.

Use the steps below to configure the UWQ media actions for Advanced Outbound.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click the **UWQ Media Action** tab.

   The Media Classification Action Association page appears.

2. From the drop-down list in the Media Type column, select **Advanced Outbound Telephony**.
3. In the Classification column, type **Campaign** to associate to outbound TeleSales, or type **Collections** to associate to outbound Collections.
4. From the drop-down list in the Media Action column, select the Oracle application you want to launch.
   - If you typed **Campaign** in the Classification column (step 3), then select **TeleSales Outbound Telephony function**.
   - If you typed **Collections** in the Classification column (step 3), then select **Outbound Collections Telephony function**.
5. Click **Update**.

For more information and detailed steps setting up the media actions for Advanced Outbound, refer to the *Oracle Universal Work Queue Implementation Guide*.

6

Diagnostics and Troubleshooting

Use the information in this topic group to diagnose and troubleshoot your implementation of Oracle Advanced Outbound.

Diagnostic Tools

Troubleshooting

6.1 Diagnostic Tools

There are a number of tools you can use to diagnose problems with Oracle Advanced Outbound, including:

Oracle Interaction Center Server Manager (ICSM)

The Advanced Outbound HTML Administration Console

The Marketing Online HTML Administration Console

Java Console Logs

6.1.1 Using Oracle ICSM to Diagnose Issues

With Oracle Interaction Center Server Manager (ICSM), you can:

Start and Stop Servers

Set Server Log Levels

Set Trace File Options

Check Server Log Messages

Check Server Parameter Settings

6.1.1.1 Starting and Stopping Servers With ICSM

Follow the steps below to start or stop your servers with Oracle ICSM.

Login

Self-Service Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click **ICSM > Server Groups**.

   The Server Group List page appears.

2. Click a server group name.

   The Server Group Details page appears, displaying a summary view table of all servers in that group.

3. From the list to the left of the Submit button:

   a. Select **Start** to start the selected server

   b. Select **Stop** to stop the selected server.

4. Click **Submit**.

   It may take several minutes to start or stop the server processes. To view the current status during startup or shutdown, refresh the browser several times.

   As the server processes are starting up, "Starting" is displayed in the Stop/Start column. As the server processes are shutting down up, “Stopping" is displayed in the Stop/Start column. The status of each server process is displayed in the Servers area in the Status column.

6.1.1.2 Setting Server Log Levels With ICSM

You can use the database logging function to obtain information about when servers are started or stopped, and the reasons why they started or stopped.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click **ICSM > Server Groups**.

   The Server Group List page appears, displaying a summary view table of any existing server groups.

2. From the Server Group Name column, click the server group that contains the server on which you want to set log levels.

   The Server Group Details page appears for the selected server group, displaying a summary view table of any servers in that server group.

3. From the Server Name column, click the server on which you want to set log levels.

   The Server Details page appears for the selected server.

4. From the Server Details page, click the **Parameters** hyperlink.

   The Server Details page refreshes to display a summary view table for parameter settings.

5. In the Parameter Value field for OAO_LOG_LEVEL, type one of the following levels:

   - **error** - shows server errors.
   - **warn** - shows server warnings and errors
   - **info** - shows events, warnings, and errors
   - **all** - shows all server activity

   The log level can be changed while the server is running, but you must wait for the time period specified in the OAO_ REFRESH_INTERVAL parameter before the information in the log begins reflecting the new log level.

6. Click **Update**.

7. Click **Done**.

6.1.1.3 Setting Trace File Options With ICSM

You can use the server trace function to obtain detailed information about server activity. By default the trace function is not activated.

Use the steps below to activate the trace function.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. From the Oracle Call Center Technology page, click the **ICSM** tab.

   The Server Group List page appears, displaying a summary view table of any existing server groups.

2. From the Server Group Name column, click the server group that contains the server on which you want to run the tracing function.

   The Server Group Details page appears for the selected server group, displaying a summary view table of any servers in that server group.

3. From the Server Name column, click the server on which you want to run the tracing function.

   The Server Details page appears for the selected server.

4. From the Server Details page, click the **Advanced** hyperlink.

   The Server Details page refreshes to display a Java Options field, a Server Arguments field, and a summary view table of any existing trace files for the selected server.

5. In the Server Arguments field:

   a. Type **-logfile all** - this traces through the startup steps until database logging starts.

   b. Type **-logfile /tmp/log.txt** - this will generate a /tmp/log.txt file, and either a /tmp/PRS***.trace file (for the dial server) or a /tmp/OCS***.trace file (for the central server).

   > **Note:** You will need to bounce the server to start or stop the tracing process.

6. Click **Update**.

7. Click **Done**.

6.1.1.4 Checking Server Log Messages With ICSM

Follow the steps below to check the server log messages.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click **ICSM > Logs > Summary Report**.

   The Summary Report for Servers page appears.

2. Click the **Server Name**, **Server Type**, or **Server Group** radio button and search for the server name, type, or group (respectively) in the provided field.

3. Click **Go**.

   The Summary Report for Servers page refreshes to display a summary view table. This table contains a log message count for each level of logging for each server in the selected server, server type, or server group.

4. From the table, click the log count hyperlink for the severity level you want to view.

5. If you need to narrow your report findings, click **Advanced Search**.

   The Search for Logging Messages page appears.

6. Select the desired server name, type, or group (respectively) in the provided field.

7. From the list in the User Filter field, select a filter to use with your search (if you have created any filters to use).

8. From the list in the Severity field, select the level of severity on which you want to search.

9. If you know a specific error code, type it in the Error Code field.

10. Use the From Date/Time and To Date/Time fields if you know approximately when the error occurred.

11. Click **Summary Report**, or **Detailed Report** to view the results of your search.

6.1.1.5 Checking Server Parameter Settings With ICSM

Follow the steps below to check server parameter settings.

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click **ICSM > Server Groups**.

   The Server Group List page appears, displaying a summary view table of any existing server groups.

2. From the Server Group Name column, click the server group that contains the server on which you want to set log levels.

   The Server Group Details page appears for the selected server group, displaying a summary view table of any servers in that server group.

3. From the Server Name column, click the server on which you want to set log levels.

   The Server Details page appears for the selected server.

4. From the Server Details page, click the **Parameters** hyperlink.

   The Server Details page refreshes to display a summary view table of the parameter settings for the selected server.

5. Verify that the parameter settings are correct.

   For a detailed list of the necessary parameters for Advanced Outbound servers, refer to the Implementing the Advanced Outbound Servers section.

6.1.2 Using the Advanced Outbound HTML Admin Console to Diagnose Issues

You can use the Oracle Advanced Outbound HTML Administration console to:

Check Campaign Schedule Parameters

Check Target Group Parameters

6.1.2.1 Checking Campaign Schedule Parameters in Advanced Outbound

Follow the steps below to check campaign schedule parameters in the Advanced Outbound HTML Admin console.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps:

1. From the View field, select **My Campaign Schedules** to check the parameters for a campaign schedule you created in Oracle Marketing Online.
2. From the Name column of the summary view table on the Campaign Schedules page, click the name of the campaign schedule you want to check.

   > **Note:** If you do not see the desired campaign schedule displayed, check Oracle Marketing Online to ensure the campaign schedule is configured properly.

   The Call Center Campaign Schedule Details page appears, displaying a Call Center Parameters area and a Predictive Telephony Parameters area.
3. In the Calendar field, verify the correct the user defined calendar is associated with the selected campaign schedule (if you want one to be).

   > **Note:** If predictive dialing will not be used, click **Update** after selecting the user defined calendar.

4. Do you want the CTI Disabled checkbox selected?

   Checking this box disables computer telephony for the selected campaign schedule. With CTI disabled, only manual dialing is allowed.
5. Is the On Hold checkbox selected?

   Selecting the On Hold checkbox will place on hold a campaign schedule with a status of Active.

6. In the fields listed under the Predictive Telephony Parameters area, verify the following information:

   Note: You only need to enter information in the Predictive Telephony Parameters fields if the campaign schedule will use predictive dialing.

   a. In the Predictive Dialing Time-out field, check the number of seconds you want to wait before a predictive dial times out.

   Note: Valid values are between 15 and 45 seconds.

   b. From the drop-down list in the Ring-No-Answer field, verify the number of rings you want to allow before Advanced Outbound registers the call attempt as a RNA (Ring No Answer).

   c. From the drop-down list in the Targeted Abandonment Rate field, check the maximum acceptable percentage for abandoned calls. If a dial is placed and a live voice is detected, but there is no agent available, the call is abandoned.

   d. From the drop-down lists in the Special Intercept Tones summary view table, verify whether you want to recycle the call or have the agent manually handle the following types of special intercept tones: Reorder Handling, Intercept Handling, Vacant Handling, and Network Busy Handling.

   e. From the drop-down list in the Answering Machine Detection field, check the level you want the system to detect answering machines, or whether you want no answering machine detection.

   Note: Selecting **No answer machine detection** will cause Advanced Outbound to forward answering machine calls to agents as live connections.

   f. From the drop-down list in the Answering Machine Handling field, verify your selection for how you want the call attempt handled if an answering machine is detected.

g. If you selected **Message** in the previous step, select the phone type and the message you want to play from the drop-down fields on the summary view table under the Answering Machine Handling field. Otherwise go to step h.

h. From the drop-down list in the Front Hold Message field, select whether or not you want to enable or disable Front Hold Messages.

Note: A front hold message is a message that is played when a live voice is detected, but an agent is not available to take a call. The message should persuade the customer to hold until an agent is available. Enabling front hold messaging will place the call on a front hold queue if no agents are available to take the call.

---

i. If you selected **Enable** in the previous step, select the phone type and message you want to play from the drop-down fields on the summary view table under the Front Hold Message field. Otherwise, go to step 7.

7. Once you have made changes, click **Update**.

   You return to the Call Center Campaign Schedule Details page and a confirmation note is displayed, stating that the configuration was successful.

   For more information on how campaign schedule parameters should be set up for Advanced Outbound, refer to the Define Campaign Schedule Parameters topic in this guide.

6.1.2.2 Checking Target Group Parameters in Advanced Outbound

Follow the steps below to check target group parameters in the Advanced Outbound HTML Admin console.

Login

HTML Login URL

Responsibility

Advanced Outbound Administrator

Steps

1. From the View field, select **My Campaign Schedules**.

2. From the Name column of the summary view table on the Campaign Schedules page, click the name of the campaign schedule containing the target group you want to check.

   The Call Center Campaign Schedule Details page appears, displaying a Call Center Parameters area and a Predictive Telephony Parameters area.

3. From the side navigation bar, click **Campaign Schedule Target Groups**.

   The Interaction Center Campaign Schedule Target Groups page appears, displaying a summary view table of the target group associated to the selected campaign schedule.

4. From the Name column of the summary view table, click the name of the target group for which you want to check parameters.

   The Interaction Center Campaign Schedule Target Group Details page appears.

5. From the drop-down list in the Dialing Method field, verify your dialing method selection or select to default to the campaign schedule's dialing method.

6. From the drop-down list in the Target Group Priority field, check the priority assigned to the target group.

   > **Note:** Priorities determine the relative priority of a target group or subset in comparison to other target groups and subsets.
   >
   > Highest through Medium level priorities are preemptive; all target groups with priorities in this range will be exhausted in priority sequence before the next priority level is used. Low and Lowest priorities are used in round-robin fashion; each of these target groups will release its quantum of records, then the next target group in the same priority level will be used.
   >
   > At this time, Oracle Marketing Online does not support multiple target groups.

7. From the drop-down list in the Recycling Algorithm field, verify you have selected the recycling algorithm you want to use for the target group.

8. From the drop-down list in the Record Filter field, check that you have selected the record filter rule you want to use with the target group.

9. From the drop-down list in the Validation Rule field, check that you have selected the validation rule you want to use with the target group.
10. From the drop-down list in the Calendar field, verify that you have selected the user defined calendar you want to use with the target group (if you want to use one).
11. From the drop-down list in the Release Strategy field, verify you have selected the correct release strategy to use with the target group.

> **Note:** The quantum release strategy supports proportional calling across all target groups and subsets associated with the campaign strategy and it is considered the baseline strategy for an Advanced Outbound service. This means that when Advanced Outbound is distributing customer records to agents, it releases a quantum number of records from each target group or subset before it goes on to the next target group or subset in the campaign.
>
> The Quota Release Strategy stops releasing records from a target group or subset when a pre-defined limit has been reached. This strategy disburses records from a target group or subset based on the quota that is assigned to a target group or subset.

12. Check the number of records you set as your limit in either the Quantum or Quota field.

> **Note:** If you selected **Quota** in step 11, you must select the hour and minute reset period from the drop-down list in each respective field. These fields specify the hours and minutes before the quota value is reset to zero (0).

13. Once you have made your changes, click **Update**.

    The Interaction Center Campaign Schedule Target Group Details pages updates to reflect the new dialing parameters and displays a confirmation stating that the dialing parameters have been configured successfully.

    For more information on how target group parameters should be set up for Advanced Outbound, refer to the Define Target Group Parameters topic in this guide.

6.1.3 Using the Oracle Marketing Online HTML Admin Console to Diagnose Issues

You can use the Oracle Marketing Online HTML Administration console to:

Check Campaign Schedules and Target Group Parameters

Check the Agent to Campaign Assignment

6.1.3.1 Checking Campaign Schedule and Target Group Parameters

Follow the steps below to check campaign schedule and target group parameters in OMO.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. Click the **Campaign** tab.

   The Campaigns page appears, displaying a summary view table of all existing campaigns.

2. From the table, select the campaign containing the campaign schedule in which you want to view parameters.

   The Campaign Details page appears.

3. From the side navigation panel, click **Execution**.

   The Campaign Details - Campaign Schedule page appears, displaying a summary view table of all campaign schedules associated with the selected campaign.

4. From the summary view table, click the campaign schedule in which you want to view parameters.

   The Campaign Schedule – Details page appears.

5. Verify the campaign schedule parameters.

   For more information on campaign schedule, refer to the Creating an OMO Campaign Schedule topic in this guide.

6. From the side navigation panel, click **Execution > Target Group**.

The Campaign Schedule Details - Target Group page appears.

7. Verify the target group parameters.

   For more information on target group parameters, refer to the Configuring an OMO List, and Configuring an OMO Target Group topics in this guide.

6.1.3.2 Checking the Agent to Campaign Schedule Assignment

Follow the steps below to check the agent to campaign schedule assignment in OMO.

Login

HTML Login URL

Responsibility

Oracle Marketing Super User

Steps

1. From the Oracle Marketing Online homepage, click the **Administration** tab.
2. Click the **Sales** subtab.
3. From the side panel under Call Center, click the **Agent Assignments** hyperlink.

   The Resource Assignment window appears.
4. In the Campaign Name field, type the name or a partial name of the appropriate campaign schedule. You can use the % sign to substitute for missing characters.
5. Click **Go**.
6. From the list, select the appropriate campaign schedule and click **OK**.

   The campaign schedule name populates the Campaign Name field. and the Current Resource Assignments table refreshes to display all the agents currently assigned to the selected campaign schedule.
7. Verify that the correct agents are assigned.

6.1.4 Using Java Console Logs to Diagnose Issues

The Java Console is a pop-up window that you can configure to appear whenever you launch an Oracle Forms session.

You can use the Java console logs to track application trace messages, to verify server information from the agent side, and to diagnose problems when dealing with multiple servers.

6.2 Troubleshooting Advanced Outbound

The following are the most commonly experienced errors with Advanced Outbound:

Servers Won't Start

Validation Failed

Validation Doesn't Fail, but no Records are Returned

Can't See Advanced Outbound Telephony Media Node

No Campaign Schedules Appear

Queue Count Doesn't Update

Central Server Isn't Pulling Records

No More Callable Records for an Agent

Agent Cannot Make Progressive Calls

Oracle Telephony Manager Cannot Get Media Items From Advanced Outbound

Oracle Telephony Manager Received two Media Items for the Same Advanced Outbound Call

Media Items Were Not Closed

Advanced Outbound Fails in the Dial Server, but no "Enabler Related Errors" are Generated

Predictive Call Fails in the Dial Server and Call Outcome is "no ringback", "no dialtone", etc.

Predictive Call Goes Through, but Transfer to Agent Fails

Target Group Stuck in Validating Status

No Longer Seeing IEO Log Messages

6.2.1 Servers Won't Start

Reason:

No database connection.

Check:

Check the .dbc file. Make sure that NUM_CONNECTIONS in dbc file is set high enough.

Reason:

ICSM setup is incorrect.

Check:

Check server arguments (ICSM - Advanced link).

Reason:

Server or plugin parameters are incorrect.

Check:

Verify the server parameters are correct

Ensure the values set in ICSM (Advanced link) are correct

Ensure Java arguments set to at least "-ms256m mx256m"

Ensure server node is running (ICSM).

Start the server at the local node using a local script.

6.2.2 Validation Failed

6.2.2.1 Quick Tips

- Make sure your Central Server and Dial Server(s) are running and set your trace level to **All**.
- Make sure your OMO Campaign and Campaign Schedule are **Active**.
- Make sure your OMO Target Group has a status of **Locked**.

- Make sure the Interaction Center Ready column of your Advanced Outbound Campaign Schedule is set to **Yes**.
- Make sure your Advanced Outbound Campaign Schedule Target Group parameters are correctly configured.

Reason:

OMO Source Type does not exist or OMO Source Type does not have required columns

Check:

Check the logs files for the following error messages:

- Error messages titled 'Validation Error'.
- "ORA-00942: table or view does not exist"
- "Source type view XXX has not been created in Oracle Marketing Online"
- "ORA-00904: invalid column name"
- "Source type view XXX is missing one or more columns."

Solution:

Create or update the OMO list source type. Ensure all the required fields are present.

Reason:

Insufficient Table Space

Check:

Check the log files the following error message:

- "ORA-01654: unable to extend index IEC.IEC_G_RETURN_ENTRIES_N3 by 8195 in tablespace IECX"

Solution:

Ask your DBA to extend the table space specified in the error message.

6.2.3 Validation Doesn't Fail, but no Records are Returned

Reason:

- Missing Time Zone Information
- Missing country code or area code
- Phone number contains invalid characters

Check:

- Check time zone and time in the user record
- Check country code/area code in user record
- Check user phone numbers

Solutions:

- Add missing data/correct error data
- Create validation rules to insert time zone
- Create validation rules to add country code/area code

6.2.4 Can't See Advanced Outbound Telephony Media Node

Reason:

The agent's profile options are not set correctly

Check:

The profile settings for the agent.

1. Self-Service Login URL (Forms).
2. Select **System Administrator** responsibility.
3. Click **Profile > System**.
4. Type agent's user ID and click **Find**.

Solution:

Ensure the following profile options are set:

- "IEU: Media: Telephony" – set to "Yes"

- “IEU: Queue Order: Advanced Outbound” – set to “1”
- “IEU: Queue: Advanced Outbound” – set to “Yes”

6.2.5 No Campaign Schedules Appear

Reason:

The agent, or group to which the agent belongs, is not assigned to a campaign schedule

Check:

Ensure that the agent (or group that the agent belongs to) is assigned to a campaign schedule

Reason:

The concurrent manager has not been started

Check:

Ensure the concurrent manager is running

6.2.6 Queue Count Doesn’t Update

Reason:

The concurrent manager is not running.

Check:

Ensure the concurrent manager has been started.

Note: The queue count only changes when the concurrent manager is running. The count only reflects changes in:

- the number of records that are set to “Do Not Use” (by recycling).
- the number of records that are no longer calendar callable (fall outside the callable time parameters as defined in the calling calendar).

6.2.7 Central Server Isn't Pulling Records

Reason:

Server Time Zone is not configured.

Check:

Check the log messages for any error messages with title "Calendar Error".

Solution:

Configure Server Time Zone in the Advanced Outbound Administration console.

Reason:

Country calendar does not exist.

Check:

Check the country calendar in the Advanced Outbound Administration console.

Solution:

Create the country calendar.

6.2.8 No More Callable Records for an Agent

Check:

- Check if the correct campaign shows up on the UWQ desktop for this agent.
- Check the campaign record count.
- Check if the status of the campaign is active.
- Ensure the status of the corresponding target group is "Executing".
- Check the Campaign Record Details report to see if there are any records currently available.
- Check the Timezone report to see if there are any callable records at this time.
- Check if the Central Server is running. Wait for at least 2 * Retrieve interval and see if this happens again.
- Check if a calling calendar has been assigned to the campaign.

- Check if a calling calendar has been assigned to the target group.
- Check if the release strategy and the corresponding value has been set.
- Check Quantum - Quantum value and Quota - Quota value.
- Check if the database server time zone has been set.
- Check the refresh and recover parameter values on the central server.

6.2.9 Agent Cannot Make Progressive Calls

Reasons:

- Middleware configuration error.
- CCC is not running.

Check:

Check for these errors in dial server trace file:

- “no middleware”
- “cannot connect to proxy server …”
- “cannot connect to cti server…”
- “enabler related error …”

Solution:

- Check middleware IP address, port number, CTI server ID, PBX name, etc.
- Ensure Call Center Connectors is running.

6.2.10 Oracle Telephony Manager Cannot Get Media Items From Advanced Outbound

Reason:

Middleware configuration error.

Solution:

If middleware is CT_CONNECT, make sure "enable server application data" in CT_CONNECT configuration is selected.

6.2.11 Oracle Telephony Manager Received Two Media Items for the Same Advanced Outbound Call

Reason:

Middleware configuration error.

Solution:

If middleware is CT_CONNECT, make sure "enable server application data" in CT_CONNECT configuration is selected.

6.2.12 Media Items Were Not Closed

Reason:

Middleware configuration error.

Solution:

If middleware is CT_CONNECT, make sure "enable server application data" in CT_CONNECT configuration is selected.

6.2.13 Advanced Outbound Fails in the Dial Server, but no "Enabler Related Errors" Are Generated

Check:

- Examine the Call Center Connectors log (log level must be 4). Determine if the number actually dialed has proper "prefix", (external access prefix, long distance prefix, etc...).
- If no prefix, check middleware configuration, domestic dialing prefix, international dialing prefix, outgoing prefix, site area code, site country code, site overlay, site internal number length, site local number maximum length, etc...

6.2.14 Predictive Call Fails in the Dial Server and Call Outcome is "no ringback", "no dialtone", etc.

Check:

Make sure the connect between the VDU board and the switch is correct.

6.2.15 Predictive Call Goes Through, but Transfer to Agent Fails

Check:

Make sure the VDU port configuration and extension number are correct, and that they match the physics port on the switch.

Make sure the middleware configuration, predictive transfer flag, and predictive answer flag are set up correctly.

Ensure the switch is certified with Advanced Outbound.

6.3 Advanced Outbound Central Server Troubleshooting

This topic group contains information to help you resolve common problems with the AO Central Server.

The following topics are included:

Cannot Start the Server

AOCS starts but does not get records

6.3.1 Cannot Start the Server

1. No database connection

   Check the .dbc file, make sure that NUM_CONNECTIONS in dbc file is high enough.

2. ICSM setup is incorrectly

   Check server arguments.

3. Server or plugin parameters are incorrect

   – Check if the parameters have been added

   – Check if the values set in ICSM (Advanced link) are correct

- Make sure the server node is running (ICSM). If the server is not running, try to start the server again from ICSM
- Try to start the server at the local node using a local script.

4. DB Server Time Zone is incorrect

   Correct the DB Server Time Zone using the AO Administrator utility, under the Administration Tab.

5. Another OCS is running

   Use ICSM to check/change server status.

6.3.2 AOCS Starts but Does not get Records

1. Make sure the schedule has been marked for Telemarketing.
2. Make sure the schedule has a status of 'LOCKED'.
3. Make sure the target group has been generated for the schedule using lists that have been generated using one of the two supported source types.
4. Make sure the target group has a status of 'LOCKED' in order to validate target group.
5. Make sure that the list is executing

6.4 Advanced Outbound Dial Server Troubleshooting

This topic group contains information to help you resolve common problems with the AO Dial Server.

The following topics are included:

Server Does not Start

6.4.1 Server Does Not Start

1. No database connection

   Check the dbc file

2. ICSM setup is incorrect

   Check server arguments

3. Server parameters are incorrect

4. Another Dial Server is running with the same server id

   Use ICSM to check/change server status

6.4.2 Agent Was Not Able to Login

1. Make sure that the agent is assigned the System Profile for AO

   Use the System Administrator Responsibility, and click **System**, then **Profile**. Set the AO profile parameters to “Yes”.

2. Make sure that the agent is assigned to one of the running campaign schedules.
3. Make sure that there are valid executing campaign schedules.

6.4.3 Agent Cannot Get Work

1. Check if the agent/campaign schedule association is set.
2. Check if the campaign schedule/target group is in the correct state and that the calendar is callable.
3. Check the number of available records in this target group.
4. Records may not be in cache, check if Central Server has been started; check the execution interval of the Refresh plugin.
5. Wait and test again.

6.4.4 Dials Cannot be Placed

1. Make sure that the correct extension was provided.
2. Make sure that the middlewares in your server group are configured correctly (use the Call Center HTML Administrator responsibility, "Middleware" tab).

   Check the IP address and the port of Telephony Adapter Server.

   Make sure that the middleware parameters are set for Advanced Outbound use (including setting the "Use with Advanced Outbound" parameter to **Yes**).

3. Make sure that the Telephony Adapter Server is up.
4. Make sure that VDUs are correctly configured (Advanced Outbound Administrator responsibility, "Telephony" Tab).

   The status must be set to "ACTIVE".

   The VDUs must be associated with correct middleware and dial server.

In the case of multiple VDUs per middleware, make sure rotary settings do not conflict.

Make sure that the port numbers/Extensions are correct.

6.4.5 Receiving Too Few Records for Target Group

1. Check to ensure there is a country calendar defined for each country code used in the target group.
2. Check to ensure each target groups source type matches the source type defined for the target group.

6.4.6 Receiving no Records

1. Check to ensure the source type defined for the target group matches the source type defined for the target groups.
2. If list validation fails, you should check the AO central server log files (via Oracle Call Center Technology Admin -- ICSM tab). If you see a message indicating that the database view is missing, you must go into the Oracle Marketing Online Admin (Administration > Marketing > Audience > Data Sources) and select data source types for Organization Contacts and Person List, then click **Update**. Selecting these data source types will create the OMO views used by AO.

6.4.7 Failed Validation

6.4.7.1 Quick Tips

- Make sure your Central Server and Dial Server(s) are running and set your trace level to **All**.
- Make sure your OMO Campaign and Campaign Schedule are **Active**.
- Make sure your OMO Target Group has a status of **Locked**.
- Make sure the Interaction Center Ready column of your Advanced Outbound Campaign Schedule is set to **Yes**.
- Make sure your Advanced Outbound Campaign Schedule Target Group parameters are correctly configured.

6.4.7.2 OMO source types do not exist or do not have the required columns.

Use the steps below to diagnose this problem:

Login

HTML Login URL

Responsibility

Call Center HTML Administration

Steps

1. Click the ICSM tab.

   The Server Group List page appears, displaying a summary view table os any existing server groups.

2. From the top bar, click **Logs**.

   The Summary Report for Servers page appears, displaying a summary view table of all the servers in the group.

3. From the list of servers, locate the appropriate server and click the hyperlink to display the log error messages.

   The Detail Report page appears, displaying a summary view table of all the error messages for the selected server.

4. In the Title column of the summary view table, search for error messages titled "Validation Error".

5. Click the **Record ID** hyperlink to display the error message in the Message Description text box.

6. Check for the following error messages:

   - ORA-00942: table or view does not exist

     Source type view XXX has not been created in Oracle Marketing Online

   - Ora-00904: invalid column name

     Source type view XXX is missing one or more columns

If you locate these error messages, you must create or update the OMO Source type view. Follow the steps in the Defining List Source Types topic to do so.

6.4.8 Target Group Stuck in Validating Status

If a target group stays in the 'Validating' status for an extended period of time, it is likely the case that validation has failed, but was unable to update the status to "Failed Validation". This usually occurs when there is a tablespace issue and the error message could not be logged. After the tablespace is increased, the target group will automatically resume validation.

Check:

Check your table space sizes.

Solution:

Although the exact tablespace configuration will depend on what applications are running in the database and needs to be reviewed by a dba, Oracle recommends the following sizes for a sytem configured exclusively for AO:

- TEMP (500 MB)
- USER_DATA and USER_IDX (300 MB)

6.4.9 No Longer Seeing IEO Log Messages

If you stop seeing new error messages (beyond a specific date) in the IEO Log Viewer, it is very likely that you need to extend your tablespace. This is especially true if you are running into other errors that cannot be explained since other parts of the application may be failing, but are unable to log the errors due to the tablespace issues.

Check:

Check your table space sizes.

Solution:

Although the exact tablespace configuration will depend on what applications are running in the database and needs to be reviewed by a dba, Oracle recommends the following sizes for a sytem configured exclusively for AO:

- TEMP (500 MB)
- USER_DATA and USER_IDX (300 MB)

A

Seed Data

This topic group consists of topics providing information on how to add additional values to the seeded values shipped with Oracle Advanced Outbound.

The topics include:

- Adding Do Not Use Reason Codes
- Adding List Priority Values
- Setting the Positive Flag for Outcome and Result Codes

A.1 Adding Do Not Use Reason Codes

Use the steps below to create additional Do Not Use Reason Codes.

Login

Self-Service Login URL (Forms)

Responsibility

Applications Developer

Steps

1. Click **Applications**, **Lookups**, then **Common**.

   The Application Utilities Lookups window appears.

2. On the main toolbar of the Application Utilities Lookups window, click **View**, **query by example**, then **enter**.

3. Type **IEC%** in the query field.

4. On the main toolbar, click **View**, **query by example**, then **run query**.
5. From the list of returned values, locate the IEC_DNU_RESASON table.
6. Once you have located this table, you can create additional values by clicking the empty field directly below the last entry and typing in your values.

> **Note:** When you click an empty field, the Extensible radio button should automatically be selected. If not, be sure to select this radio button as it allows you to add values other than the seeded one.

A.2 Adding List Priority Values

Priorities determine the relative priority of a list or subset in comparison to other lists and subsets.

Highest through Medium level priorities are preemptive; all lists with priorities in this range will be exhausted in priority sequence before the next priority level is used. Low and Lowest priorities are used in round-robin fashion; each of these lists will release its quantum of records, then the next list in the same priority level will be used.

Use the steps below to create additional list priority values.

Login

Self-Service Login URL (Forms)

Responsibility

Oracle Marketing Administrator

Steps

1. Click **Setups > Lookups**.

   The Oracle Marketing Lookups dialog box appears.
2. In the Type field, search for AMS_PRIORITY.
3. In the provided fields, you can add entries for custom list priorities.
4. Click **Save**.

Note: You must enter a value in the Tag field for each list priority you define. Valid values are between 1 and 100, where 1 is highest and 100 is lowest priority.

A.3 Setting the Positive Flag for Outcome and Result Codes

Use the steps below to set the positive flag for outcome and result codes.

Login

Self-Service Login URL (Forms)

Responsibility

Interaction History

Steps

1. Click **Interaction History Administration**.

   A screen appears, displaying tabs for Outcome, Result and Reason codes.

2. Click the tab to which you want to add values (Outcome, Result, etc.)
3. On the window's main toolbar, click **View**, **query by example**, then **enter**.
4. Type **IEC%** in the query field.
5. On the main toolbar, click **View**, **query by example**, then **run query**.
6. Use the up and down scroll arrows on your keyboard to scroll through the list of returned values.
7. Click the Positive Outcome flag checkbox for each value that has a positive outcome.

Glossary

Abandoned Calls

A call that was dialed by the predictive dialing server; however no agent was available when the call was connected, therefore the predictive server dropped the line. Also known as nuisance calls. The goal of Advanced Outbound is to reduce/eliminate these calls.

Automatic Call Distributor (ACD)

ACDs are automated systems that answer calls and attempt to route those calls as quickly as possible to the right person or agent. ACDs are used to uniformly distribute a large volume of incoming calls to a number of operators as soon as they have a free line and are often used by businesses with a large number of incoming calls such as airlines and insurance companies. Sometimes ACDs will prompt you to press a few touch-tone digits so that they can route your call more quickly.

Calendar

Specify dates and times when the list is accessible. Advanced Outbound utilizes two types of calendars, Country and User Defined.

Callback

A feature of Advanced Outbound that allows a call to recur at a specified interval if a live contact is not achieved on the first attempt.

Call Progress Detection

The process of listening for audible tones such as dial tone, SIT tones, busy signals, and ring-back tones to determine the state of a call through the network. When dialing in predictive mode, this process is done through the ISDN Network

Interface boards. In non-predictive dialing modes (preview, and progressive), the agent will have the responsibility of determining the call progress.

Calling List

A collection of records containing a unique identifier, and possibly other information about a customer/contact/prospect. Calling lists are generated by Oracle Marketing Online and executed within Oracle Advanced Outbound.

Call Outcome

A consequence from a dial attempt to contact a customer. 'Outcome' reflects network connectivity (e.g. connect, busy, ring-no-answer, SIT, etc.); a list of system defined outcome codes are defined within Advanced Outbound, others may be user defined.

Call Result

A consequence from a dial attempt to contact a customer. 'Result' reflects the results of a completed connection and is user/application defined. Examples of 'Results' could include: "Sale" or "No Sale" or "Wrong Party Contact".

Call Reason

A consequence from a call result of a customer contact. 'Reason' codes are optional user/application defined. It is used to further detail the 'Result' of the call, such as "Too Expensive" or "Using Competitor's Product" or "No Interest"

Campaign

An organizational unit of a focused marketing effort.

Campaign Schedule

A time specification during which the campaign may execute.

Canonical Dialing Strings

A format string for representing a telephone dialing sequence.

> **Example: +** *CountryCode* **Space (***AreaCod***e) Space** *SubscriberNumber*

The components of this structure are given in the following:

> **+** It indicates that the number that follows it uses the canonical format.
>
> *CountryCode* - A variably sized string containing one or more of the digits **0-9**. The *CountryCode* is delimited by the following **Space**. It identifies the country in which the dial destination is located.

Space Exactly one character. It is used to delimit the end of the *CountryCode* part of a dial string.

AreaCode A variably sized string containing zero or more of the digits **0-9**. *AreaCode* is the long distance dialing information portion of the address and is optional. If the area code is present, it must be preceded by one left parenthesis, and followed by right parenthesis and one **Space** character.

SubscriberNumber A variably sized string containing one or more of the digits **0-9**.

Computer Telephony (CT)

This term refers to technology that applies computer intelligence to making, receiving, and managing telephone calls. CT technology encompasses products such as voice and fax messaging, auto attendants, fax-on-demand, fax servers, and interactive voice response (such as automated order-entry systems). Core technologies include voice recognition, text-to-speech, and more recently, the Internet. In other words, CT systems automatically handle and process phone calls. These systems often let agents or call recipients control various aspects of the call using either a touch-tone phone or spoken commands.

Disconnect

The dissociation or release of a switched circuit between two stations.

Front hold Message

A message played when an agent is not available to take a call.

List Priority

The list manager will select records to be pulled based on the priority of the lists, where the lower the number assigned to a list, the higher the priority of the list. Lists with the same priority will be round-robined.

List Subset

A logical grouping of records within a list where members of the group must meet criteria defined for the group.

Marketing Medium

A marketing medium is the marketing channel for your marketing activity. It is the specific magazine or television station where you advertise or the telemarketing center executing your campaign.

No Answer Ring Count

Specifies the number of rings before Advanced Outbound considers the call outcome to be “no answer”.

Node

Identifies the server (machine) on which the server process runs.

Oracle CRM Foundation

The CRM Foundation provides a variety of services that can be exploited, as appropriate, by any of the other applications of the Oracle CRM Suite. The CRM Foundation provides standard APIs for accessing and manipulating business objects such as customer, resource, and task records. In addition to these APIs, the Foundation also provides robust processing engines, such as Territory Manager and 1-to-1 Fulfillment. One of the most important components of the Oracle Foundation is the customer data model known as the Trading Community Architecture (TCA). This powerful model permits the capture of complex customer relationships and supports flexible business models across industries. Finally, the Foundation’s business APIs facilitate integration of the CRM suite with legacy or third-party applications in environments where that is essential.

Predictive dialing

Advanced placing of calls out to an automated dialer where the determination of when and how many calls are to be placed, is driven by an algorithm. The algorithm takes into consideration many factors (number of agents, agent talk time, connection rate, abandonment rate, etc.) and calculates the number of calls to place given the rate of agent availability.

Prefetch

Prefetch means that the Central Server fetches a certain number of records into its cache before they are requested by the Dial Server. The exact number of records is calculated by the server, based on requests from the Dial Server. The interval specifies how frequently this should be done by the server — to reduce making database trips on demand, and to reduce recycling unused records from the cache back to the database.

Preview dialing

A dialing method where agents are presented the record to be called, and the agents determine when the dial is to be placed.

Private Branch eXchange (PBX)

A private internal phone system that services a number of extensions. A PBX is invariably connected to an external public telephone system.

Progressive dialing

A dialing method where the system simultaneously initiates the dialing of the record with that of displaying the record to an agent for review.

Quantum Release Strategy

The base release strategy of the list manager, where quantum applies to all the other strategies. The quantum strategy round-robins the release of records from the list based on the quanta number assigned to the list. Each list releases a set number of records—its quantum—each time it is accessed, provided that there are that many records available in the list at that time.

Quota Release Strategy

Quota release strategy modifies the quantum release strategy to only allow the completion of a certain number of records—the list's quota—from a list during a time period specified in the parameters for the list. At the beginning of each time period the quota for the list is reset.

Recycling

The process of executing business rules as defined by Advanced Outbound to determine if and when a customer record should be called again.

Record Filter Criteria

A boolean condition logic which, in the context of this guide, specifies conditions which a record must meet before the record is available to be dialed.

Special Information Tones (SIT)

Signals from the telephone network when certain error conditions are encountered. Standard SIT tones detected by Advanced Outbound include:

- Reorder
- Vacant
- Busy
- Intercept

Switch

A piece of equipment that establishes and routes communication paths between separate extensions.

Trading Community Architecture (TCA)

The trading community architecture is an architecture concept designed to support complex trading communities. The goal of TCA is to provide the foundation for Oracle ERP, CRM, and E-Business applications (i.e. the entire E-Business Suite). To do this, TCA strives to model all relationships within a "Trading Community". This enables one data model to store B2B, B2B2C, B2C, B2C2C, and partner model data.

Unsuccessful Call

A call attempt that does not result in the establishment of a connection.

Voice Detection Unit (VDU)

These are physical hardware cards which must be placed into a server running Windows NT or 2000. They allow Advanced Outbound to do voice detection and classification of non-contact calls.