Oracle® Predictive

Concepts and Procedures

Release 11*i*

August 2000

Part No. A86104-01

ORACLE®

Oracle Predictive Concepts and Procedures, Release 11*i*

Part No. A86104-01

Copyright © 2000, Oracle Corporation. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information of Oracle Corporation; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. Oracle Corporation does not warrant that this document is error free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Oracle Corporation.

If the Programs are delivered to the U.S. Government or anyone licensing or using the programs on behalf of the U.S. Government, the following notice is applicable:

Restricted Rights Notice Programs delivered subject to the DOD FAR Supplement are "commercial computer software" and use, duplication, and disclosure of the Programs, including documentation, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement. Otherwise, Programs delivered subject to the Federal Acquisition Regulations are "restricted computer software" and use, duplication, and disclosure of the Programs shall be subject to the restrictions in FAR 52.227-19, Commercial Computer Software - Restricted Rights (June, 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and Oracle Corporation disclaims liability for any damages caused by such use of the Programs.

Oracle is a registered trademark, and Oracle Predictive is a trademark or registered trademark of Oracle Corporation. Other names may be trademarks of their respective owners.

Contents

Administering Oracle Predictive

Send Us Your Comments

Oracle Predictive Concepts and Procedures, Release 11*i*

Part No. A86104-01

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 via the postal service.

Oracle Corporation
CRM Content Development Manager
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

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

Welcome to the Oracle Customer Relationship Management, Release 11*i*, suite of applications.

This Concepts and Procedures provides information and instructions to help you work effectively with Oracle Predictive.

This preface explains how Concepts and Procedures is organized and introduces other sources of information that can help you.

Intended Audience

This guide is aimed at the following users:

- Technical Service Representatives (TSR)
- Customer Service Representatives (CSR)
- System Administrators (SA), Database Administrators (DBA), and others with similar responsibility
- Call Center Managers and Supervisors

This guide assumes you have the following prerequisites:

1. Understanding of computer-telephony integration (CTI)
2. Understanding of call center technology
3. Understanding of the company business processes
4. Understanding of Oracle databases

Structure

This manual contains the following sections:

“Understanding Oracle Predictive" provides overviews of the application and its components, explanations of key concepts, features, and functions, as well as the application’s relationships to other Oracle or third-party applications.

“Implementing Oracle Predictive” provides general descriptions of the setup and configuration tasks required to implement the application successfully.

“Administering Oracle Predictive" provides task-based procedures for required for ongoing system maintenance and includes information on administration tools and utilities.

Related Documents

For more information, see the following manuals:

- *Installing Oracle Predictive*

Oracle Predictive

Oracle Predictive, along with Oracle Campaign Plus, is a module of Oracle Advanced Outbound. Oracle Predictive is a highly scalable software-based predictive dialer that is driven by Campaign Plus. It improves interaction center profitability by improving campaign results without increasing staff.

This document covers the following sections:

Understanding Oracle Predictive

Provides background information that you will need to understand the application and perform the tasks within the application.

Implementing Oracle Predictive

Provides setup and configuration information.

Administering Oracle Predictive

Provides information about modifying and managing settings within the application.

Installing Oracle Predictive

Provides information on installing the application.

Understanding Oracle Predictive

This topic group provides overviews of the application and its components, explanations of key concepts, features, and functions, as well as the application's relationships to other Oracle or third-party applications.

View one of the following for more detailed information:

Overview of Predictive

The Oracle Predictive module is a software-based solution that uses Computer Telephony Integration (CTI) technology to predictively dial numbers. As a dialing utility coupled with the Oracle Campaign Plus module to form Oracle Advanced Outbound, Oracle Predictive allows your company to have one enterprise-wide dialing system that can be centrally managed. Oracle Predictive helps to maximize the efficiency of your dialing operations and reduces agent wait time.

Predictive provides an advanced real-time, call-pacing algorithm based on expected agent availability and projections of successful contacts to set the rate at which outbound calls are passed to the agent. Call anticipation is based on real-time patterns and trends of phone calling, and estimates when an agent will be available for their next call and when the called party will answer the phone. The computer uses the projections to begin dialing phone numbers before any agents are actually available, in anticipation of an agent requesting another call. Its goal is to "match up" the point in time when both the agent and the contacted party are ready to speak.

Predictive dialing is most effective when used on campaigns that have four or more agents associated with them. However, because using predictive dialing eliminates human error in dialing and reduces non-productive time, it is an effective method of improving your call center's outbound performance no matter how many agents you have working.

Dialing Environment: Manual Versus Automated

In a manual dialing environment, agents use the following tools to accomplish their job: paper lead sheets, product information, reference manuals, and telephone set.

All of these tools rely on the agent for their proper use. Human nature dictates that these tools are not always used to greatest effect. Incorrectly sorted leads, partially penetrated lists, misplaced manuals, and mis-dialed numbers are common scenarios in manual telemarketing environments.

In an automated environment, the system performs all the functions for the agent, except what the agent does best: selling! With an automated telemarketing system, the leads are automatically sorted and distributed in a timely fashion; the reference information is available at a keystroke; but more importantly, the most tedious task, and the one that results in the most errors-*dialing*-is handled by an integrated computer and telephony system. The automated environment not only facilitates an increase in speed, but an increase in accuracy as well.

Types of Autodialing

Within the automated dialing environment are two types of autodialing. These are discussed briefly below.

Type	Description
Analog	Analog dialing makes use of a printed circuit board that converts a computer's digital codes into a form that a telephone switch can understand (analog signals). Using this technology, an application can request that a customer's telephone number be dialed. As far as the telephone switch is concerned, the application is just another telephone set.

Type	Description
Digital	Digital dialing makes use of a software product that can translate the digital codes into directions that a telephone switch can understand. The switch is able to understand the computer's digital codes, which are instructions that the switch can perform (e.g., make a call, answer the telephone, hang-up the telephone, etc.).

The Dialing Process

In a manual environment, you pick up the handset and wait to hear the dialing tone before dialing. Although you perceive that you can hear the tone as soon as you lift the handset, it really takes a fraction of a second before the tone is heard. After you dial, you wait until you hear a ring or busy signal. If you hear a busy signal, you must decide if and when to call back. If you hear a ring, you must decide how many rings you will listen to before you conclude that the party is not available.

Of course, for humans this process is not consciously performed, so simple are the steps involved. But in the automated environment each possible monitoring step and each decision phase must be designed into the hardware or programmed into the software.

Dialing Modes in an Automated Environment

There are four autodialing modes in the automated dialing environment. Each of these is listed below, along with an explanation of what the agent can expect to see with each. Following the explanations are two tables. The first table shows steps in the progressive dialing environment and the second table shows the steps in the predictive dialing environment.

Mode	Description
Preview	When a campaign is set to use preview dialing, the customer's number is not immediately dialed when the agent requests a new contact. The customer information is provided at the agent workstation. This affords the agent time to review the call activity for this particular customer prior to actually calling them. The agent must press the dial button in order for the customer's number to be dialed. Then the agent must listen to the progress of the call (i.e., busy, ringing, etc.) and process it accordingly. The ratio of calls placed to agent requests is one to one. This mode is frequently used by companies that practice an account management style of business.
Timed Preview	Timed preview is the same as preview except that the agent can review the customer profile only for a set period of time. When the time period is completed the call is automatically launched and the customer is dialed.
Progressive	When a campaign is set to use progressive dialing, the customer's number is automatically dialed as soon as the agent receives a new lead from the campaign list. The customer record is presented to the agent at the same time the number is dialed. Although the display of customer information may take less time to be displayed than the actual placing of the call, there is not as much time to review the customer's history as in preview dialing. Even with this method however, the agent must listen to the progress of the call and process it accordingly. The ratio of calls placed to agent requests is one to one.
Predictive	When a campaign is set to use predictive dialing, the answered call and the customer record will arrive at the agent's workstation simultaneously. The difference between the previous two modes and this one is that the dialing is being performed by the Oracle Predictive service. The aim is to match the customer's voice with the arrival of their record at an available agent's workstation. The main goal of predictive dialing is to increase a call center's contacts by eliminating undesirable calls (for example: busies, no answers, operator intercept messages, etc.). The agent does not listen to the call progress, therefore the ratio of calls placed to agent requests is many to one. The Oracle Predictive service provides this capability, and more, to your call center.

Progressive Versus Predictive

Progressive Dialing Steps

The table below shows the steps involved in a progressively dialed call.

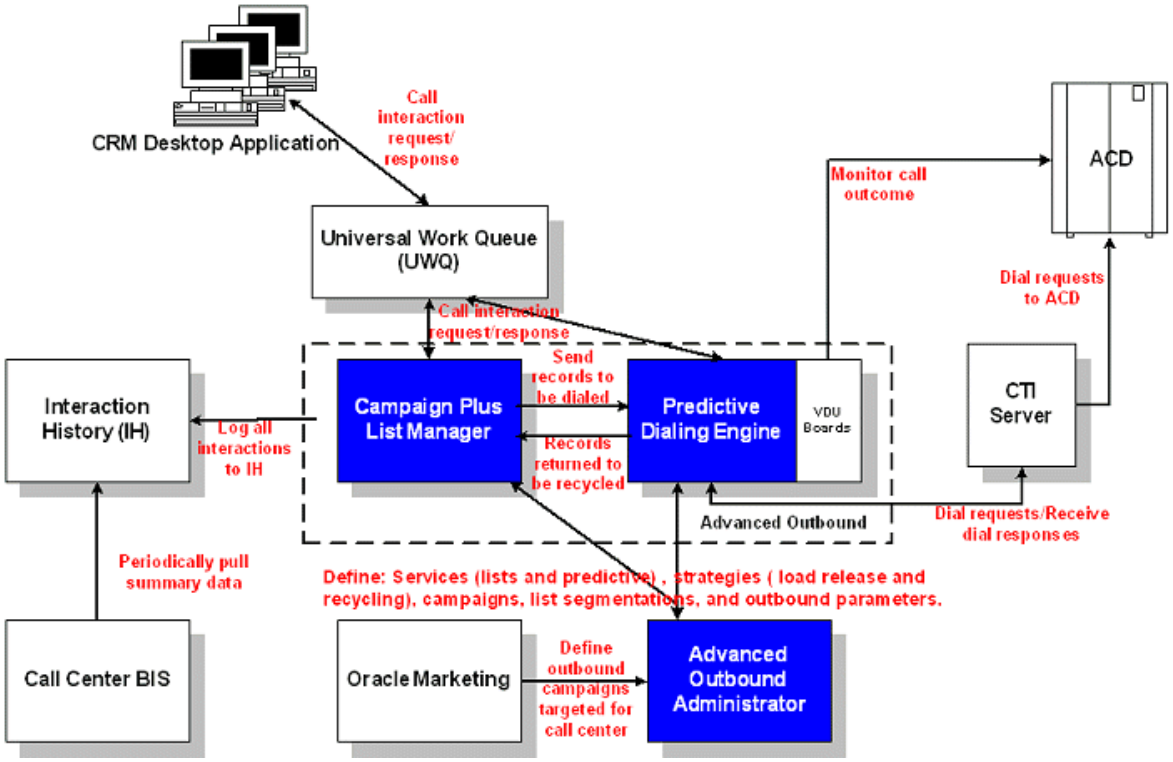
Action	Description
1	Agent requests the next record from the list manager (Campaign Plus).
2	Campaign Plus sends the record to the agent application workstation.
3	The agent receives a screen pop of the record.
4	At the same time that the agent gets the screen pop, the agent's application sends a call request to the PBX.
5	The call is sent to the Public Switched Telephone Network (PSTN) on behalf of the agent. The agent is then responsible for processing the call.

The table below shows the steps involved in a predictively dialed call.

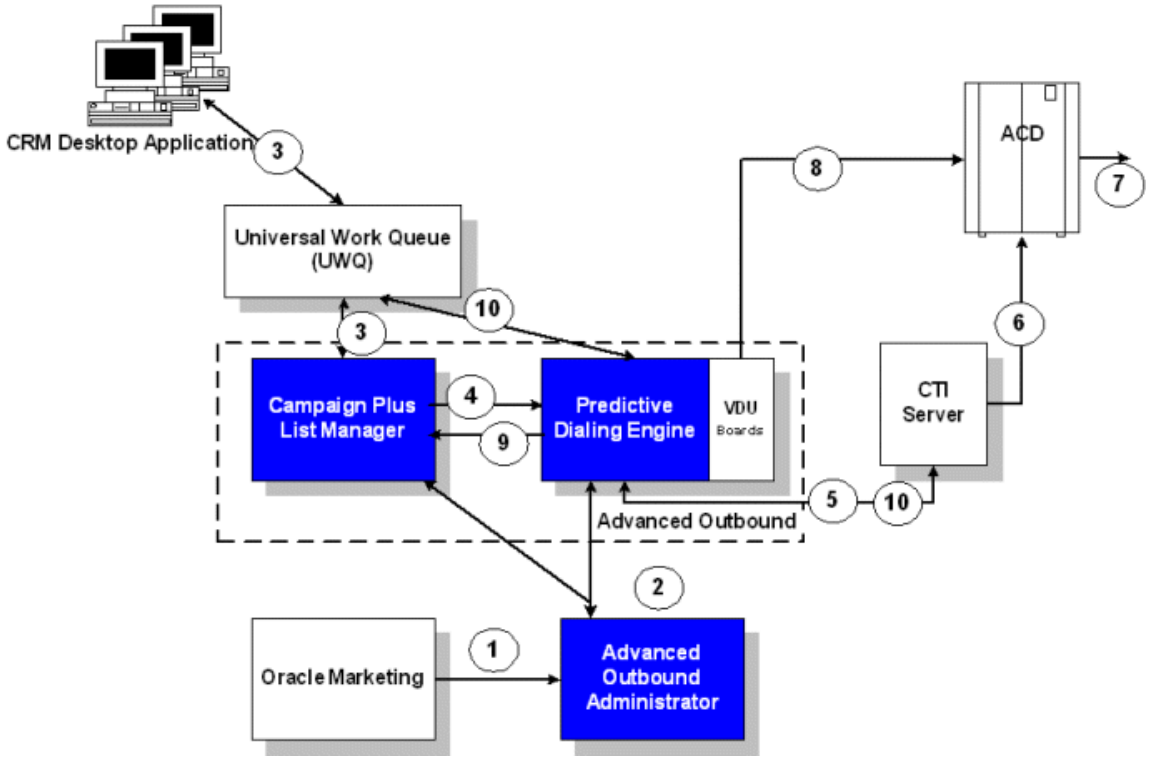
Action	Description
1	Campaign Plus uploads a portion of a list.
2	Oracle Predictive instructs the Computer Telephone Integration (CTI) server to make a call.
3	CTI server makes a call through the PBX.
4	The PBX places the call to the PSN.
5	The Voice Detection Unit (VDU) listens to the call to determine whether it results in a voice connection.
6	The VDU reports the call progress to the CTI server.
7	The call progress is reported and noncontact calls are sent to Campaign Plus for recycling.
8	For a live answer, the agent application receives the customer ID, name and custom Campaign Plus data. At the same time, the PBX is instructed (through the CTI) to transfer the call to an available agent's extension.
9	Agent application uses the customer ID to request profile information from the database server.

Action	Description
10	The database server sends the profile information to the agent workstation.
11	Screen pop of the full customer profile information appears for the live voice call.
12	After the call is completed, its result is sent back to Campaign Plus and the outcome code is processed.

Advanced Outbound Business Flow



Advanced Outbound Transaction Flow



Call Flow

1. Oracle Marketing identifies the campaigns and customers to be contacted through the call center channel.
2. Advanced Outbound administrator will create the campaigns and import the list to be dialed.
3. CRM desktop application initiates outbound call request to list manager via UWQ.
4. List manager sends (call record) numbers to be dialed to predictive dialer service.
5. Predictive utilizes the CTI server to dial number.

6. CTI server initiates the dialing w/ ACD.
7. ACD sends dial to public switch network.
8. Predictive's VDU boards "listens" to call progress of call made.
9. If call is not a live connect, then Predictive sends record back to list manager to be recycled.
10. If a live connect, Predictive initiates a phone transfer to available agent station (via CTI server path) and send data for screen pop to CRM desktop application via UWQ.

Implementing Oracle Predictive

This topic group provides overviews of the application and its components, explanations of key concepts, features, and functions, as well as the application's relationships to other Oracle or third-party applications.

This topic group covers the following topics:

What are Configuration Worksheets?

Configuration worksheets help you gather the information required to configure Predictive. You must enter all of the information in the worksheet during the configuration procedure. To properly configure Oracle Predictive, please use the following worksheet.

Worksheet for Virtual PBX Service Configuration

Please complete the following:

- Identify the name of the virtual PBX service: _____

Note: The virtual PBX name identifies the PBX in Oracle Integrated Manager. It does not reflect or affect the actual PBX configuration.

- Identify the PBX type: _____
- If the PBX is CTI-enabled, identify the following CTI parameters:
  - The name of your CTI middleware: _____
  - The name of the machine hosting the CTI middleware: _____
  - The network protocol used by the CTI server to communicate with the switch:_____

    Note: The network protocol that the CTI server uses to communicate with the switch should be set as part of the logical link configuration on the CTI server. The default is ncacn_ip_tcp.

  - The name given to the physical PBX when it was configured:

    _____
- Identify the local call data file to be used during predictive dialing:_____

  Note: The host name is typically at the start of the data packet (that is, at position 0).

  Note: The length of the host name is typically 2 characters.
- Identify the following CTI parameters:
  - The Oracle PBX Type:
    - _____ Meridian: 1
    - _____ Lucent: 2
    - _____ Other: _____
  - The PBX type:

    - _____ Meridian: M
    - _____ Lucent: A
    - _____ Other: _____

- The time, in seconds, after which the monitor will restart the CTI interface when the Retry Limit is exceeded:_____
- The time, in seconds, after which the monitor will reinitialize the CTI extension when CTI initialization fails:_____
- The maximum number of times the monitor should attempt to initialize the CTI interface before restarting the CTI interface:_____

  Note: The data label identifies the data in Oracle Integrated Manager and does not affect the data label in the IVR data packet.

- The logical name of the CTI link from the PBX to the switch:

  _____

- The name of the port.: _____

  Note: The port name should comprise the IVR host name and the IVR port number. For example, if the IVR host name is 01 and the IVR port number is 0001, then the port name should be 010001. You can find the IVR host name in the IVR data packet.

- The switch directory number of the IVR port: _____
- Whether the port is currently in service:
    - _____ Yes
    - _____ No

Configuring Oracle Predictive Message Control

If you plan to record voice messages to handle answering machine detection, then you must configure Oracle Predictive Message Control.

Use this procedure to configure Oracle Predictive massage control.

Prerequisites

None

Steps

1. Start the Integrated Manager Administrator MMC Console.
2. From the Console menu, select **Add/Remove Snap-in**.
3. In the Add/Remove Snap-in dialog box, select **Add**.
4. In the Add Standalone Snap-in dialog box, select **General Control** from the list of Snap-ins. Click **Add**.
5. The **Insert ActiveX Control** wizard starts. Click **Next**.
6. From the list of All controls, select **Oracle Predictive Message Control** under the category **Controls**. Click **Next**.

> **Note:** Select only the Controls category entry. Do not select Embedded Objects or Automation Objects.

7. Click **Finish** to complete the installation.
8. In the Add Standalone Snap-in dialog box, click **Close**.
9. In the Add/Remove Snap-in dialog box where the Oracle Predictive Message Control is listed, click **OK** to return to Integrated Manager.
10. Select the **Console Root** node and verify that the Oracle Predictive Message Control is listed in the results pane.

References

Creating a Virtual PBX Service

Modifying a Virtual PBX Service

Deleting a Virtual PBX Service

Creating a Virtual PBX Service

Use this procedure to create a virtual PBX service.

Prerequisites

None

Steps

1. Start Oracle Integrated Manager and select the Administrator Console.
2. Expand the **Oracle Integrated Manager** node if you have not already done so.
3. Right-click **PBX Configuration**.
4. Click **New** then **Virtual PBX Service**. The **Create PBX** Wizard appears.
5. Click **Next** to begin creating your PBX service.
6. Type the name of the virtual PBX service and click **Next**.
7. Select the PBX type from the drop-down list and click **Next**.
8. If the PBX is CTI-enabled, specify the following CTI parameters, and click **Next**:

Parameter	Description
CTI enabler	Select the name of your CTI middleware.
CTI server name	Type the name of the machine hosting the CTI middleware.
CTI network type	Select the network protocol used by the CTI server to communicate with the switch. This should have been set as part of the logical link configuration on the CTI server. The default is ncacn_ip_tcp.
Actual PBX name	Type the actual name given to the physical PBX when it was configured.

9. Enter the enable-specific configuration information for the selected CTI enabler.
10. If you are using Oracle Predictive, then enter the required enabler-specific Predictive transfer information.
11. Click **Browse** to select the local call data file to be used during predictive dialing.
12. Click **Finish** to create the monitor for the virtual PBX service based on the parameters entered in the wizard.

    The virtual PBX service appears in the scope pane of the Microsoft Management Console under the PBX Configuration node for Oracle Integrated Manager.

References

Configuring Oracle Predictive Message Control

Modifying a Virtual PBX Service

Deleting a Virtual PBX Service

Modifying a Virtual PBX Service

Use this procedure to modify a virtual PBX service.

Prerequisites

None

Steps

1. Start Oracle Integrated Manager and select the Administrator Console.
2. Expand the **Oracle Integrated Manager** node, if you have not already done so.
3. Expand the **PBX Configuration** node.
4. Right-click the virtual PBX service that you want to modify.
5. Click **All Tasks**, and **View Properties**. The PBX Properties dialog box appears.
6. Use the PBX Properties dialog box to edit the properties of the virtual PBX service.

References

Configuring Oracle Predictive Message Control

Creating a Virtual PBX Service

Deleting a Virtual PBX Service

Deleting a Virtual PBX Service

Use this procedure to delete a virtual PBX service.

Prerequisites

None

Steps

1. Start Oracle Integrated Manager and select the Administrator Console.
2. Expand the **Oracle Integrated Manager** node, if you have not already done so.
3. Expand the **PBX Configuration** node.
4. Right-click the virtual PBX service that you want to delete.
5. Click **All Tasks** then **Delete PBX Service**.

References

Configuring Oracle Predictive Message Control

Creating a Virtual PBX Service

Modifying a Virtual PBX Service

Setting Filters for Logs

The filters determine how and when alert messages are tracked and logged for all services and servers. Use this procedure to set the logging filters.

Prerequisites

A service must have been created and exists for Predictive in Oracle Integrated Manager.

Steps

1. From the Oracle Integrated Manager navigation tree, double-click **Outbound**.
2. Double-click **Predictive Services**.
3. Click the appropriate service.
4. Right-click **Log and Alerts**.
5. Select **All Tasks**.
6. Select **Set Filter**.

   The Set Filters for Log / Alerts screen will display. The Set Filters for Log / Alerts screen consists of two types of filter settings: Time Filters and Other Filters.

Note: Log filters apply to all services.

7. In the Time Filter box, enter the parameters as you want them to apply to the service. You can use the time filters to identify how you want to query the results of the logging activity.
8. If you do not want to set the filtering of logs by time, select the **No Time Filter** option.
9. If you want logs to be shown for a set number of hours, select the **Show Log/Alerts for Last Hours** option.

   Select the value from the LOV. You may choose any number of hours between 1 and 24. Beginning with 24 hours, the setting is incremental by 24, up to 72 hours. The default is 24.

   Or, if you choose, you can enter the desired number of hours in the **Show Log/Alerts for Last Hours** field.
10. If you want to filter by a date range and time, select the **Show Log/Alerts from and To** option.

    Enter the date from which to begin or select the date from the LOV. When you select the LOV, the calendar feature will display for data selection.

    Enter the time from which to begin showing logs or select the time. Click the hour and choose the up or down arrows in the field to increase or decrease the time by 1 hour. When you click the minute or second values, you can increase or decrease each by 1 minute or second respectively.
11. In the Other Filters box, enter the parameters as they apply to the filters being defined.
12. You can determine the severity level to be used as a filter. There are 5 levels:
    - informational
    - trace
    - minor
    - major
    - critical

    If you want to filter logs and alerts by severity level, select the **Show Log/Alerts with severity level greater than** option. Next, select a level from the LOV.

13. You can also filter logs and alerts based on action ID. When the action ID is equal to the selected action, the alert will display and be logged. The filter options are:
    - log
    - set alert
    - clear alert
    - clear all
14. If you want to set the filters by action ID, select the **Show Log/Alerts with action ID equals to** option. Next, select the action from the LOV.
15. The **Show Max** option is a required field with a default setting of 100. You can modify the number as required. You may enter any number of records from 1 to 1000.
16. Click **OK**.

References

Activating Alerts

Activating Alerts

Alert messages for all services are controlled from the Logs and Alerts node in Oracle Integrated Manager. When you activate alert messages, alerts will be monitored and captured for all services. Each alert message will display in a separate window. You also can stop the alerting feature through the Logs and Alerts node. Use this procedure to activate alert messages for all services.

Prerequisites

A service must have been created and exists for Predictive in Oracle Integrated Manager.

Steps

1. From the Oracle Integrated Manager navigation tree, double-click **Outbound**.
2. Double-click **Predictive Services**.
3. Click the appropriate service.
4. Right-click **Log and Alerts**.

5. Select **All Tasks**.
6. Select **View Alerts**.

> **Note:** When you enable the viewing of alerts, as alert messages are generated, they will display in a separate window for viewing.

7. Click **OK**.

References

Setting Filters for Logs

Administering Oracle Predictive

This topic group provides task-based procedures for required for ongoing system maintenance and includes information on administration tools and utilities.

This topic group covers the following topics:

Administering Predictive Overview

Oracle Predictive module is a service-based application that runs on a Windows NT Server. Use Oracle Integrated Manager to create, configure, and administer Oracle Predictive. You must have Integrated Manager and the Oracle Campaign Plus module installed and operating to use Predictive. For installation of Integrated Manager, refer to the Campaign Plus Installation documentation.

After you install the Oracle Predictive module, a wizard guides you though the steps needed to create a Predictive service. You can change or expand the service later by changing its properties.

Creating a Predictive Service

Use this procedure to create an Oracle Predictive service.

Prerequisites

Before you can use Campaign Plus to assign predictive dialing campaigns, you must have an Oracle Predictive service available. You can then go back to Campaign Plus and assign services and campaigns to use to the new Predictive service. You can also assign new Campaign Plus services to use the new Predictive service.

Steps

1. From the Integrated Manager console tree, right-click the **Predictive Services** node.
2. From the popup menu select **New**, then **Predictive Service**.
3. Click **Next** to start creating a new service.
4. Type a name for the service. You may use numbers 0 to 9, letters A to Z, and underscore characters. The service name must begin with a letter.
5. Select the Service Location from the drop-down list. The Service Location is the host machine where this service should be located.
6. Select the hardware layer.
7. Enter the Country Code where this Predictive server is located.
8. Enter the Area Code where this Predictive server is located.
9. Select the ODBC Data Source Name and enter the User ID and password.

10. Enter the DCE principal and password.
11. Select the time of day that you want the service to start calling. It will start only on the days of the week you check.
12. If you want Predictive to shut down automatically every day, then select the Automatic shut down check box.
13. Select the full path for the Log file directory. This is where the log files will be located. Use **Browse** to find the location. The UNC log is defined by your selection.
14. Select the full path for the Predictive executable file. Use **Browse** to find the location.
15. Select the PBX to associate with your Predictive service, and click **Next**. If you need to create a new PBX, click **New PBX** and follow the PBX wizard. Refer to the Oracle Predictive Installation documentation for more information.
16. If you need to generate a new Voice Detection Unit for this Predictive service, click **Create VDU**.
17. From the **Create Predictive VDU** Wizard, click **Next**.
18. Select the type of VDU from the list.
19. Select the number of cards you are using. The number of ports is based on the type of card you selected in the previous window.
20. Enter the base telephone extension and the increment value.
21. Review the VDU summary to verify your selections. Use **Back** to make any changes. Click **Finish** to create the VDU. If the extensions are not contiguous, you can change them later in the PBX configuration properties. Refer to the Oracle Predictive Installation Guide for more information.
22. Review the Predictive service summary information. Use **Back** to make any changes. Click **Finish** to create the Predictive service.
23. Click **OK** to return to Integrated Manager.

References

Viewing and Changing Predictive Service Properties

Call Abandonment Rate

Monitoring Predictive Services

Deleting a Predictive Service

Viewing and Changing Predictive Service Properties

You can view the properties of any Predictive service in Integrated Manager. You can also change many of the properties to manage the predictive dialing environment and to match your predictive dialing needs.

Use this procedure to view and change Predictive service properties.

Prerequisites

A Predictive service must exist before you can view or change its properties.

Steps

1. From the Integrated Manager console tree, select the **Predictive** node. The Predictive services appear in the results pane.
2. In the result pane right-click the desired Predictive service.
3. From the pop-up menu, select **All Tasks** then **View Properties**. The Predictive Configuration Properties dialog box appears.
4. From the General tab you can view or change the following properties:
   - Server name (view only)
   - Hardware image
   - I/O log status
   - Event log status
   - Version
5. From the Network tab you can view or change the following properties:
   - Registration name (view only)
   - RPC protocol
   - Receive deadline
   - Agent RPC timeout
   - Rundown wait time
   - Response deadline
   - Server RPC timeout
6. From the Dialer tab you can view or change the following properties:

- Voice assign timeout
- Consecutive error threshold
- Total error threshold
- Restart time
- Throttle time

7. From the Locale tab you can view or change the following properties:
   - Locale
   - Country code
   - Area code

References

Creating a Predictive Service

Call Abandonment Rate

Monitoring Predictive Services

Deleting a Predictive Service

Call Abandonment Rate

Abandonment rate allows Predictive to manage outbound calls so the call rate does not exceed the abandon limit you set. The abandon limit is the percentage of calls that you are willing to accept being dialed but having no agent available to answer.

A low abandon limit will reduce the number of abandon calls to your customers. However, agents may have to wait longer for a call to be passed to them.

A higher abandon limit will reduce the agent wait time between calls but may increase the number of abandoned calls.

With predictive dialing you should always enable the call abandonment rate and set an abandon limit.

Use this procedure to enable call abandonment and to set the abandonment limits.

Prerequisites

A predictive service must exist before you can enable the call abandonment rate or set the abandon limit.

Steps

1. From the Integrated Manager console tree, select the **Campaign** node of the desired Predictive service. The Oracle Campaign Plus and Predictive servers must be running to see the campaigns.
2. From the list of campaigns in the results pane, right-click the desired campaign.
3. From the popup menu, select **View Properties**. The Predictive Campaign Properties dialog box appears.
4. From the Pacing tab, select the Enable Pacing check box.
5. Enter the desired Abandon limit as a percentage of total calls. Click **OK**.

References

Creating a Predictive Service

Viewing and Changing Predictive Service Properties

Monitoring Predictive Services

Deleting a Predictive Service

Deleting a Predictive Service

Use this procedure to delete a Predictive service.

Prerequisites

Deleting a Predictive service removes all information associated with that service.

Steps

1. From the Integrated Manager console tree, select the **Predictive** node. The Predictive services appear in the results pane.
2. From the list in the result pane, right-click the desired Predictive service.
3. Select **All Tasks** then **Delete *predictive name***.
4. Click **Yes** to confirm that you want to delete the selected Predictive service.

References

Creating a Predictive Service

Viewing and Changing Predictive Service Properties

Monitoring Predictive Services

You can monitor real-time and historical operations of Predictive services in Integrated Manager. You can view statistical data and graphs.

Viewing Campaign Statistics for a Predictive Service

You can view statistics for each campaign that you have running under the predictive service. These statistics offer a detailed look at the operation and results of a campaign.

The information listed in table is available in the statistics view.

Use this procedure to view campaign statistics for a Predictive service.

Statistic	Description
Calls Answered	The number of call that have been answered
Ans Machine Count	The number of calls that have detected an answering machine
Busy Count	The number of calls that have detected a busy tone
Modem Count	The number of calls that have detected a modem or fax tone
No Ans Count	The number of calls that have resulted in no answer
Other Count	The number of calls that have resulted in a status other than those defined here
SIT Count	The number of calls that have detected Special Informational Tones (SIT)
Withdraw Dial Count	The number of calls that have been withdrawn while dialing, i.e. before network ringing starts
Agents Logged In	The total number of agents logged in
Waiting Agents	The number of agents that are logged in and waiting for calls to be passed to them
Avg Wait Time	The average time, in seconds, that agents have to wait between calls

Statistic	Description
Min Wait Time	The minimum time that an agent has had to wait between calls
Max Wait Time	The maximum time that an agent has had to wait between calls
Total Contacts	Total number of contacts
Total Contact Time	Total time of all contacts since service started
Total Dials	Total number of calls that have been placed
Actual Dials / Min	The actual number of calls that occur in a minute's time
Sched Dials / Min	The number of calls that are scheduled to occur in a minute's time
Cur Dials	Number of calls currently being placed
Dials Wtg For Dialers	The number of calls that have not been dialed and are waiting for a dialer
Total Transfers	Total number of transfers
Voice Transfers	Number of times a voice was detected and that resulted in the party being transferred to another agent
Ringing Transfers	Number of transfers that are ringing
Calls Abandoned	Total number of calls abandoned because there were no agents available to take the call

Prerequisites

A campaign must be active before you can view statistics on it.

Steps

1. From the Integrated Manager console tree, select the **Campaign** node under the predictive service that you want to view.
2. Each campaign and its statistics appear in the results pane. Use the scroll bar to view additional columns.
3. If the statistics do not appear, select **Details** from the **View** menu to change the results pane layout.

References

Creating a Predictive Service

Viewing Cumulative Data for a Predictive Server

Oracle Predictive provides a set of graphs that you can use to monitor cumulative activity for the Predictive server. You can customize these graphs to provide only the information you need.

Use this procedure to view cumulative data for a Predictive service.

The following categories and graphs showing cumulative data for the Predictive server are available:

Graph	Description
Average Transaction Length	Shows the average length of time an agent spends on a transaction including wait, talk, and wrap up time.
Average Wait Time	Shows the average time, in seconds, that agents have to wait until a call is passed to them.
Logged In	Shows the number of agents logged in.
Waiting for Calls	Shows the number of agents that are logged in and waiting for calls to be passed to them.
Actual per Minute	Shows the actual number of calls that occur in a minute's time.
Anticipated per Minute	Shows the number of calls that are anticipated to occur in a minute's time.
Outstanding	Shows the number of calls that have not yet been placed.
Total	Shows the number of calls that have been placed.
Today's Outcome	Shows the overview of the results for calls the server has placed today.

Graph	Description
Abandonment Rate	Shows the percentage of calls that have not had an agent available to take them.
Agent Wait Time	Shows the average, minimum, and maximum time agents have waited to take calls.
Call Information	Shows the number of call, contacts, average contacts per agent, and agent count.

Prerequisites

None

Steps

1. From the Integrated Manager console tree, expand the desired **Predictive Service** node.
2. Expand the **Graphs** node to view the type of graphs available.
3. Select the graph you want to view.
4. The graph appears in the results pane. Adjust the window size if necessary.

References

Creating a Predictive Service

Viewing and Changing Predictive Service Properties

Call Abandonment Rate

Deleting a Predictive Service

Viewing Campaign Statistics for a Predictive Service

Viewing Specific Data for a Single Campaign

Viewing Specific Data for a Single Campaign

Predictive provides a set of graphs that you can use to monitor activity for a single campaign in the Predictive server. You can customize these graphs to provide only the information you need.

Use this procedure to view specific data for a single campaign.

The following graphs showing specific data for a selected campaign are available:

Graph	Description
Average Transaction Length	Shows the average length of time an agent spends on a transaction (including wait, talk, and wrap up time).
Average Wait Time	Shows the average time, in seconds, that agents have to wait until a call is passed to them.
Logged In	Shows the number of agents logged in.
Waiting for Calls	Shows the number of agents that are logged in and waiting for calls to be passed to them.
Actual per Minute	Shows the actual number of calls that occur in a minute's time.
Anticipated per Minute	Shows the number of calls that are anticipated to occur in a minute's time.
Outstanding	Shows the number of calls that have not yet been placed.
Total	Shows the number of calls that have been placed.
Today's Outcome	Shows the overview of the results for calls the server has placed today.
Abandonment Rate	Shows the percentage of calls that have not had an agent available to take them.
Agent Wait Time	Shows the average, minimum, and maximum time agents have waited to take calls.
Call Information	Shows the number of call, contacts, average contacts per agent, and agent count.

Prerequisites

None

Steps

1. From Integrated Manager console tree, expand the **Campaign** node under the Predictive service that you want to view.
2. Expand the campaign name under the Campaign node.
3. Expand the **Graphs** node under the campaign to view the available graphs.

4. Select the graph you want to view.
5. The graph appears in the results pane. Adjust the window size if necessary.

References

Creating a Predictive Service

Viewing and Changing Predictive Service Properties

Call Abandonment Rate

Deleting a Predictive Service

Viewing Campaign Statistics for a Predictive Service

Viewing Cumulative Data for a Predictive Server

Viewing Multiple Graphs

Integrated Manager allows you to open multiple windows at a one time. Use this procedure when you want to view two or more graphs at the same time.

Prerequisites

None

Steps

1. Maximize Integrated Manager to allow the maximum viewing area.
2. Select the **Graphs** node to display the available graphs in the results pane.
3. Right-click the graph you want to view.
4. From the popup menu, select **New window from here**.
5. Adjust the graph window the desired size.
6. Repeat steps 2 through 4 for additional graphs.

References

Creating a Predictive Service

Viewing and Changing Predictive Service Properties

Deleting a Predictive Service

Setting Graphing Properties

Setting Graphing Properties

Integrated Manager allows you to customize the presentation and configuration of the graphs. Each graph has a properties dialog box from which you can set properties for the graph.

Use this procedure to set graph properties.

Prerequisites

None

Steps

1. Select the **Graphs** node to display the available graphs in the results pane.
2. Select the graph you want to view.
3. From the scope pane, right-click the desired graph node and select **Properties**. The Graphs Control Properties dialog box appears.
4. Change graphing properties as desired.

Creating a Predictive Service

Viewing and Changing Predictive Service Properties

Deleting a Predictive Service

Viewing Multiple Graphs

Setting Data Logging Snapshots

Data logging allows you to select the time period to capture statistics. You can specify the snapshot period, which consists of the time and interval that you want data logged.

Use this procedure to enable data logging snapshots and set the snapshot period.

Prerequisites

None

Steps

1. From the Integrated Manager console tree, select the **Campaign** node of the predictive service that you want to set data logging.

2. From the list of campaigns in the result pane, right-click the desired campaign.
3. From the popup menu, select **View Properties**. The Predictive Campaign Properties dialog box appears.
4. Select the Logging tab and select Enable Snapshots check box.
5. Select the Always option if you want data logging active all the time. Then select a snapshot interval in seconds.
6. Select the Specific Time option if you want to a start and end time for data logging. Specify a date and time (`hh:mm:ss`). Then select a snapshot interval.
7. Click **OK**.

References

Creating a Predictive Service

Viewing and Changing Predictive Service Properties

Deleting a Predictive Service

Setting Graphing Properties

Handling Voice Messages

With Oracle Predictive you can choose how to handle an answering machine that answers a predictive call. If you want to leave a prerecorded message on the customer's answering machine, you must create or assign the message to be played.

You use the Predictive Voice Recording Utility to establish a connection through your Dialogic VDU board to a telephone, record your message, and give your message a file name. You can record any number of messages and store them on the server and you can select any one of the messages for playback when the predictive service detects an answering machine. The utility also allows you to import an existing.WAV file to use as your message.

> **Note:** Leaving a message when the server detects an answering machine only applies to those VDU boards capable of detecting answering machines.

View one of the following for more information:

Establishing a Voice Connection

Establishing a Voice Connection

Use this procedure to establish a voice connection.

Prerequisites

None

Steps

1. From the Integrated Manager console tree, select the **Predictive Message Control** node. The message list appears in the results pane.
2. Right-click anywhere in the message list to display the popup menu.
3. Select **Establish voice connection to Dialogic board**. Predictive displays the Establish Voice Connection window, which requires you to select the PBX and VDU. If not previously selected, you can also enter the VDU configuration information.
4. Depending on the Dialogic board type, select an analog (Type V) or Digital (Type T) VDU by clicking on the VDU name. The VDU configuration information appears in the VDU configuration portion of the screen.

   Note: You must type in the Dialer script and Number to dial the first time you select the VDU; the information you provide will be stored for subsequent use.

5. Click **Connect** to establish a connection between the database and the telephone extension. The extension will ring; you must remove the telephone receiver from its hook and speak into the receiver to establish the connection. A confirmation will appear on the screen once the connection has been successfully established.
6. Click **OK** to continue.

References

Recording or Importing a Message

You can use the voice recording utility both to record messages and to import prerecorded.WAV files.

> **Note:** Due to limitations of the Dialogic board, you can not import.WAV files with a sampling rate greater than 11 kHz mono. If you wish to import 22 kHz files, you must first convert them (using, for example, the Windows Sound Recorder utility).

Use this procedure to record or import a message.

Prerequisites

If you are recording a new message, you must first establish a connection to the telephone. If you are importing an existing file, you do not need a phone connection.

Steps

1. From the Integrated Manager console tree, select the **Predictive Message Control** node. The message list appears in the results pane.
2. Right-click anywhere in the message list to display the popup menu.
3. Select **New message**. The system displays the first screen of the New Message wizard.
4. If you want to create a new message, select the Record a new message now option. If you want to use an existing message, select the Import an existing wave (.wav) file option. Click **Next** to continue.

5. Enter the full path and filename for the message file you want to create or use **browse** to find the file to import. Click **Next**.
6. If you are recording a message, the Record prompt appears. If you are importing a file, go to step 10.
7. When you are ready to record, pick up the telephone receiver and click **Record**. After you hear the tone, talk clearly into the receiver to record you message. When you are done, click **Stop**.
8. To play the message back, click **Review**. If you want to record over the message, click **Record**, then record the message again.
9. Once you are satisfied with the message, click **Next**. The wizard displays the information prompt.
10. Enter in the short title of the message (a maximum of 32 characters), the name of the person who recorded the message (the Speaker), and a longer description.
11. Click **Finish** to continue. Your new message is listed in the Predictive Message Control window.

References

Creating a Predictive Service

Deleting a Predictive Service

Viewing Multiple Graphs

Establishing a Voice Connection

Playing a Message

Changing the Message Status

Deleting a Message

Playing a Message

Use this procedure to play a voice message.

Prerequisites

You can listen to existing messages through the telephone (via the Dialogic board), or through the computer speakers. If you want to use the phone, you must first establish a telephone connection.

Steps

1. Right-click the desired Message ID number in the **Predictive Message** list. Select **Play message** from the popup menu.
2. From the Play Message window, select **Sound card** to play the message back through the computer's speakers, or select **Dialogic board** to play the message back through the telephone.
3. Click **Play** to listen to the message.
4. When you are done listening to messages, click **Cancel**.

References

Creating a Predictive Service

Deleting a Predictive Service

Viewing Multiple Graphs

Establishing a Voice Connection

Recording or Importing a Message

Changing the Message Status

Deleting a Message

Changing the Message Status

You can edit information about a message, and change its status from Active to Inactive so that it will become unavailable to the predictive dialer.

Note: You do not have to establish a telephone connection to edit a message.

Use this procedure to change the message status.

Prerequisites

None

Steps

1. Right-click on the desired Message ID number in the **Predictive Message** list. Select **Message properties** from the popup menu.

2. From the General tab of the Properties window, you can change the title of the message, the name of the person who recorded the message (the Speaker), and the long description.
3. The Status tab indicates whether the message is Active, or available to the predictive dialer.
4. You can enter a reason for making the message inactive. Inactive messages are listed in the Predictive message window, and can be made active at any time.
5. The Location tab lets you change the host name or file name.

References

Creating a Predictive Service

Deleting a Predictive Service

Viewing Multiple Graphs

Establishing a Voice Connection

Recording or Importing a Message

Playing a Message

Deleting a Message

Deleting a Message

Note: You do not have to establish a telephone connection to delete a message.

Use this procedure to delete a voice message.

Prerequisites

None

Steps

1. Right-click on the desired Message ID number in the **Predictive Message** list. Select **Delete** from the popup menu.
2. Click **Yes** to confirm that you want to delete the selected message from the Predictive database.

3. If you also want to delete the WAV file from your computer, click **Yes**. If you delete the message here it will no longer be available.
4. The Location tab lets you change the host name or file name.

References

Creating a Predictive Service

Deleting a Predictive Service

Viewing Multiple Graphs

Establishing a Voice Connection

Recording or Importing a Message

Playing a Message

Changing the Message Status

Stopping Alerts

When it is necessary to stop alert messages, you can do so through the Logs and Alerts node in Oracle Integrated Manager. Use this procedure to stop alert messages for all services.

Prerequisites

A service must have been created and exists for Predictive in Oracle Integrated Manager and the View Alerts option from the Logs and Alerts node must have been enabled.

Steps

1. From the Oracle Integrated Manager navigation tree, double-click **Outbound**.
2. Double-click **Predictive Services**.
3. Click the appropriate service.
4. Right-click **Log and Alerts**.
5. Select **All Tasks**.
6. Select **Stop Viewing Alerts**.

Note: Oracle Integrated Manager will stop displaying alert messages for all services.

7. Click **OK**.

References

Viewing Log and Alert Properties

Viewing Log and Alerts

Viewing Log and Alert Properties

The database and alert properties can be viewed for services from the Logs and Alerts node in Oracle Integrated Manager. Use this procedure view the log and alert properties.

Prerequisites

A service must have been created and exists for Predictive in Oracle Integrated Manager.

Steps

1. From the Oracle Integrated Manager navigation tree, double-click **Outbound**.
2. Double-click **Predictive Services**.
3. Click the appropriate service.
4. Right-click **Log and Alerts**.
5. Select **All Tasks**.
6. Select **View Properties**.
7. Click **Database** tab.
8. Displays the following database properties.
   - TNS Name
   - Database User
   - Password

Note: All services use the same log and alert database setting. The parameters on the Database tab can only be viewed. They cannot be modified.

9. Click **OK**.
10. Click **Alerting** tab.
11. The number of seconds by which the system will check for alert messages will display. The default is 5 seconds. You can modify this number if required.
12. The Advanced Queuing box contains the following properties.
    - Queue Name
    - Queue Subscriber
    - Password

References

Stopping Alerts

Viewing Log and Alerts

Viewing Logs and Alerts

Alerts provide a real-time view of what is occurring in a service. When alerts are set to view, the log and the message details can be viewed. You can view alerts from the Alerts message window or from the Logs and Alerts node in Oracle Integrated Manager.

The alert records and message specifics will display in the Oracle Integrated Manager screen. Use this procedure view logs and alerts.

Prerequisites

A service must have been created and exists for Predictive in Oracle Integrated Manager and alerts must have been logged for the service.

Steps

1. From the Oracle Integrated Manager navigation tree, double-click **Outbound**.
2. Double-click **Predictive Services**.

3. Click the appropriate service.
4. Double-click **Log and Alerts**.
5. Click an alert to view.

   The message details will display in Oracle Integrated Manager for viewing.

   The following information types will display:

   - Title
   - Source
   - Instance
   - IP
   - Host
   - User
   - Time Stamp
   - Severity
   - Action
   - Details
   - XML Data
   - Record

References

Stopping Alerts

Viewing Log and Alert Properties