Oracle® Advanced Inbound

Implementation Guide

Release 11*i*

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Oracle Advanced Inbound Implementation Guide, Release 11*i*

Part No. A95154-02

Contents

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Preface

Audience for This Guide

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

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

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

  If you have never used Oracle Advanced Inbound, Oracle suggests you attend one or more of the Oracle Advanced Inbound 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 Inbound.

- Chapter 1 introduces and explains the key features of Oracle Advanced Inbound and its role within the Oracle Interaction Center product family.
- Chapter 2 describes minimum hardware and software requirements and gives an architectural overview.

- Chapter 3 describes the applications that must be implemented prior to implementing Oracle Advanced Inbound, and optional applications that provide additional functionality.
- Chapter 4 provides an overview of the implementation.
- Chapter 5 describes the implementation procedures.

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.

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 Inbound.

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 Inbound 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 Inbound.

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 from the Oracle Store at http://oraclestore.oracle.com.

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 Inbound (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 Advanced Inbound Concepts and Procedures

Use this guide for post-installation administrative procedures and for conceptual information.

Oracle Call Center Connectors Implementation Guide

Although Oracle Call Center Connectors is part of Oracle Advanced Inbound, it is not part of the standard installation. This guide explains how to install and configure Oracle Call Center Connectors.

Oracle Interaction Center Concepts and Procedures

This guide contains basic conceptual and administrative information about the Interaction Center server group architecture.

Oracle Applications Interaction Center Implementation Guide

This guide contains the installation and implementation information for the Interaction Center Server Manager (ICSM).

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, screen shots, 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

Multiple Reporting Currencies in Oracle Applications

If you use the Multiple Reporting Currencies feature to record transactions in more than one currency, use this manual before implementing Oracle Advanced Inbound. This manual details additional steps and setup considerations for implementing Oracle Advanced Inbound with this feature.

Multiple Organizations in Oracle Applications

This guide describes how to set up and use Oracle Advanced Inbound with Oracle Applications' Multiple Organization support feature, so you can define and support different organization structures when running a single installation of Oracle Advanced Inbound.

Oracle Workflow Guide

This guide explains how to define new workflow business processes as well as customize existing Oracle Applications-embedded workflow processes.You also use this guide to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes.

Oracle Applications Flexfields Guide

This guide provides flexfields planning, setup and reference information for the Oracle Advanced Inbound implementation team, as well as for users responsible for the ongoing maintenance of Oracle Applications product data. This manual also provides information on creating custom reports on flexfields data.

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 Manufacturing APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes APIs and open interfaces found in Oracle Manufacturing.

Oracle Order Management Suite APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes APIs and open interfaces found in Oracle Order Management Suite.

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 Inbound 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 Inbound 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.

Oracle MetaLink

Oracle MetaLink 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 Oracle MetaLink, 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 Oracle MetaLink alerts before you begin to install or upgrade any of your Oracle Applications. Navigate to the 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

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, Oracle Call Center Connectors and Oracle Interaction Blending.

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

Oracle 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.

See Also

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

- Oracle Advanced Inbound
- Oracle eMail Center

- Oracle Scripting

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

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: the Script Author, the Scripting Engine, and the 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 must access the Survey Admin console.

Using Oracle Scripting, an enterprise gains the ability to develop and deploy scripted presentations for customer interactions with agents, as well as build, deploy, and execute information-gathering survey campaigns for data which can be mined and used to tailor sales and service campaigns or improve customer satisfaction.

See Also

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

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.

1.2 New in this Release

In Release 11.5.6 major changes from previous versions of Oracle Telephony Manager include the following:

Note: The functionality listed here applies to all supported CTI middleware and PBX/switch platforms unless specified otherwise.

- Multi-PBX support for multiple interaction center sites for Avaya and Nortel with Intel CT Connect only.
- Internet Protocol (IP) telephony support with Cisco ICM.
- Routing administration is now done with the Oracle HTML interface.
- The forms version of Oracle Telephony Manager Administration, including call center, routing and classification administration, is no longer supported. Users should use the HTML interface for administering Oracle Telephony Manager.

- For e-mail processing enhancements, see the Oracle eMail Center Concepts and Procedures.
- Interaction Queuing and Distribution (IQD) server process maintains the queue of all media interactions and contains the logic for distributing media interactions, and performs much of the functionality provided by Oracle Telephony Manager in previous releases.
- Inbound Telephony Server is now required for both passive mode and active mode.
- Server Monitor has been replaced by the Interaction Center Server Manager (ICSM), which is now the only server process that is required to be explicitly started on each target machine.
- ICSM is responsible for starting, stopping and monitoring all the other Oracle Advanced Inbound server processes. The ICSM server processes are controlled by the Interaction Center Server HTML Administration. For more information on ICSM, see *Oracle Interaction Center Concepts and Procedures* and *Oracle Applications Interaction Center Implementation Guide.*
- Passive mode now includes the option to detect calls that are abandoned at route points, unless specified otherwise for some switch/middleware combinations.
- Oracle IVR Integrator has merged with the Inbound Telephony Server (ITS) to form an extension of the ITS.
- Data exchange formats between IVR systems and the IVR Integration Feature have been modified to send name/value pairs instead of a continuous data stream. Data packets in existing implementations will have to be migrated.
- The IVR Integration Feature supports both intelligent IVR and dumb IVR with Avaya G3 and Avaya Conversant IVR. (An intelligent IVR passes the Call ID to the IVR, while a dumb IVR does not.)

1.3 Obsolete in this Release

The following features and functionalities are obsolete in the current (11.5.6) release.

- Stand-alone mode and distributed mode are now obsolete due to the scalability of multisite support.
- Entegrity (Gradient) PC-DCE, which was used for communication between Oracle Call Center Connectors and Oracle IVR Integrator, is no longer required.

- Oracle IVR Integrator is now a built-in feature of the Inbound Telephony Server (ITS), rather than a separate product.
- Inbound Telephony Server no longer handles Web callback interactions. The Web callback function is now handled directly by the Interaction Queuing and Distribution server.
- Existing scripts and batch files (bat, sh or ini files) will no longer function and they should be discarded. Install Interaction Center Server Manager (ICSM) on the target machine and manage server groups and servers through the ICSM HTML interface.
- The Call Center Application Setup CD-ROM and all batch files and shell scripts that were used to start up and shut down the Interaction Center Servers are now obsolete and can be discarded.
- Oracle Telephony Media Controller functionality is now performed by Oracle Telephony Manager.

2

Technology, Requirements, and Performance

This chapter describes the Oracle Advanced Inbound technology stack and components that are required on clients, middle tier and database tiers, and the minimum hardware and software requirements.

2.1 Architectural Overview

The server architecture of Oracle Advanced Inbound is scalable to run interaction centers with a single physical site or multiple sites. It can also be configured to integrate IVR data.

2.1.1 Oracle Advanced Inbound Architecture

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

- Telephony platform layer consisting of the Oracle Call Center Connectors server which provides support for ACD/PBX switches and CTI middlewares 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 (USA) and 330E (International)
    - 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 Call Center Connectors
    - 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)

Oracle Interaction Blending handles the dynamic blending and assigning of agents within an interaction center. Oracle Interaction Blending balances media activity along with service levels, multiple queues and agent skill sets. Through the interactive blending of these components, agents are then dynamically assigned to work environments. Agent skills and skill sets are defined in the Oracle Human Resources Management System (HRMS) application.

While Oracle Interaction Blending is bundled together with Oracle Advanced Outbound, its implementation is covered in the *Oracle Interaction Blending Implementation Guide*.

See Also

- Oracle Advanced Outbound

- Oracle eMail Center
- Oracle Scripting

2.1.2 Oracle Telephony Manager Architecture

Oracle Telephony Manager is a key component of the Oracle Interaction Center Advanced Inbound product suite and is a prerequisite for providing the following functions and features:

- CTI support
- Soft phone support
- IVR integration
- Sophisticated routing across multiple media channels
- Advanced queuing, call treatment and overflow functionality
- Pre-integration with Oracle e-Business Suite applications

Oracle Telephony Manager provides the following essential interaction center functionalities:

- Inbound and outbound telephony
- Out-of-the box ACD/PBX connectivity with multiple ACDs and CTI middlewares
- Agent soft phone
- ANI and DNIS screen pops
- Call and data transfer

Oracle Telephony Manager provides the following additional interaction center functionalities:

- Web callback support
- Intelligent out-of-the-box routing provides rule, skill and record-based routing
- Static and dynamic routing capabilities
- Additional data for enhanced routing and screen pops via integration to IVRs
- Advanced queuing provides enhanced treatment, overflow and group queuing of calls

The Oracle Telephony Manager product consists of the following middle-tier server processes: Oracle Inbound Telephony Server, Oracle Telephony Manager, Oracle Routing Server and Oracle Interaction Queuing and Distribution Server.

2.1.3 Single Site Architecture

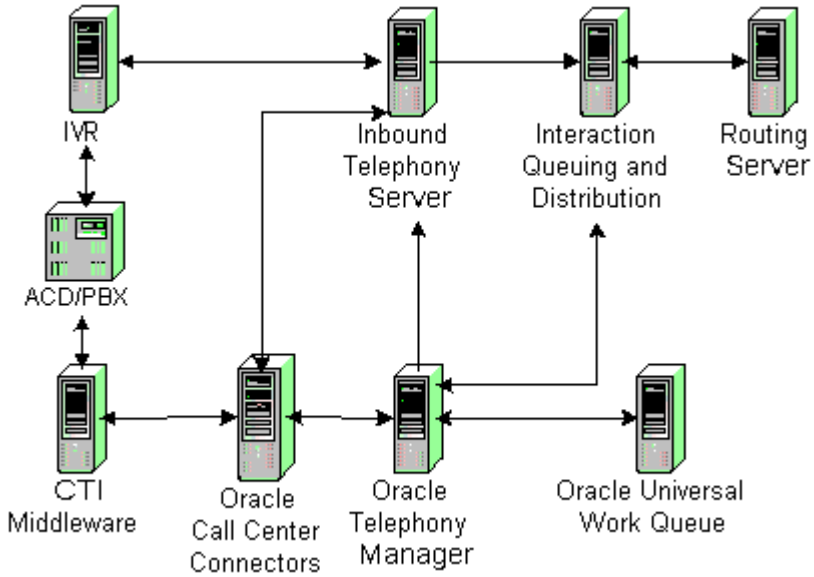
A typical Oracle Advanced Inbound server architecture for a single interaction center site consists of the following components:

- One certified PBX and CTI middleware combination
- One Oracle Call Center Connectors (CCC)
- One Oracle Inbound Telephony Server (ITS)
- One Oracle Interaction Queuing and Distribution server (IQD)
- One or more Oracle Routing Servers for scalability
- One or more Oracle Telephony Managers (OTM) for scalability
- One or more Oracle Universal Work Queues (UWQ) for scalability

Notes:

- The architecture is identical for active and passive modes.
- The IVR Integration Feature is now included in the Oracle Inbound Telephony Server.

Figure 2–1 Server Architecture for a Single Interaction Center Site with All Functionality Available for Oracle Telephony Manager



As the previous figure illustrates, when all of Oracle Telephony Manager's functions (for example, active mode, web callbacks, scalability) are available in a single interaction center site, the server architecture consists of mutual communication between the following servers:

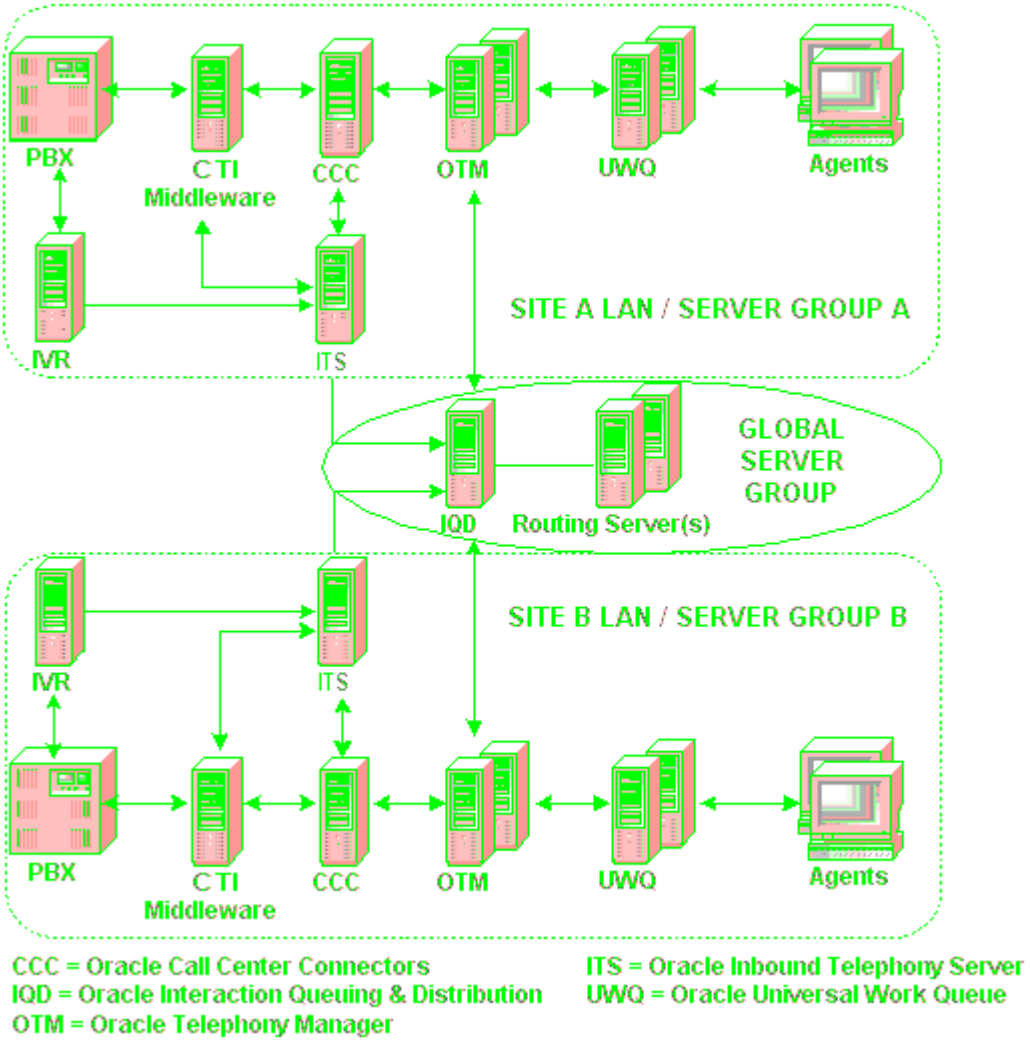
- Third-party IVR to Oracle Inbound Telephony Server (Oracle Inbound Telephony Server now incorporates the IVR Integration Feature.)
- Third-party CTI middleware and Oracle Call Center Connectors
- Oracle Call Center Connectors Oracle Inbound Telephony Server
- Oracle Inbound Telephony Server to Interaction Queuing and Distribution
- Interaction Queuing and Distribution and Oracle Routing Server
- Interaction Queuing and Distribution and Oracle Telephony Manager
- Oracle Telephony Manager to Oracle Inbound Telephony Server
- Oracle Telephony Manager and Oracle Universal Work Queue

2.1.4 Multisite Architecture

The Oracle Advanced Inbound multisite server architecture is required to support multiple ACD/PBXs that could be geographically dispersed.

The following figure illustrates the multiple PBX, multisite architecture.

Figure 2–2 Oracle Advanced Inbound Multisite Server Architecture



As the previous figure illustrates, in the multisite Oracle Advanced Inbound server architecture each site is configured as a server group that includes the following components:

- One certified PBX and CTI middleware combination
- One Oracle Call Center Connectors (CCC)
- One Oracle Inbound Telephony Server (ITS)
- One or more Oracle Telephony Managers (OTM) for scalability
- One or more Oracle Universal Work Queues (UWQ) for scalability

The global server group includes the following servers:

- One Oracle Interaction Queuing and Distribution server (IQD)
- One or more Oracle Routing Servers for scalability

Each site-specific server group associates with a global server group using the super group relationship that is defined in the Interaction Center Server Manager (ICSM) HTML Administration.

Multisite support extends the existing call routing and call-and-data transfer functionalities to interaction centers that span multiple locations. The multisite feature is currently supported for Avaya Definity and Nortel Meridian with Intel CT Connect Enterprise Edition v5.0 + Service Pack 3 or higher.

To enable multisite features, you must set up a multisite configuration and a multisite path. A multisite configuration contains all information necessary to route/transfer a call from site 1 to site 2. A multisite path contains the information (for example, trunk prefix, and so on) for one particular way to route/transfer a call from site 1 to site 2.

In some cases, there may be more than one way to route/transfer a call from site 1 to site 2 (for example, via tie line versus via PSTN). You need to set up one multisite path for each carrier option.

Note: This release supports only one multisite path per multisite configuration.

One multisite configuration (with its associated multisite path) works for one direction only. Therefore, you typically need to set up two multisite configurations to route/transfer calls bidirectionally between two sites.

2.1.5 IVR Integration Feature Architecture

Oracle Inbound Telephony Server has an IVR Integration Feature that makes IVR-collected data available as screen pops. Figure 2–1 illustrates the Oracle Advanced Inbound server architecture that includes the IVR Integration Feature.

2.2 Minimum Software Requirements

Oracle Applications 11*i*, the Call Center Java middle tier, and Oracle Telephony Manager must have been installed. Oracle Call Center Connectors must be installed and configured. Oracle Inbound Telephony Server and Oracle Telephony Manager server processes connect to Oracle Call Center Connectors, which in turn connects to third-party CTI middleware (for example, Intel CT Connect and Cisco ICM), which in turn connects to a PBX/ACD (for example, Avaya Definity). TCP/IP sockets are used for connecting to Oracle Call Center Connectors. Oracle Call Center Connectors is certified for Microsoft Windows NT 4.0 or higher only.

2.3 Switch/CTI Middleware Requirements

Oracle Advanced Inbound requires the use of an Oracle certified or supported switch that interfaces to an Oracle certified or supported CTI middleware.The following table lists the supported switches and CTI middleware combinations in Release 11.5.6.

Table 2–1 Supported Switches and CTI Middleware Combinations in Release 11.5.6

Switch/ACD	CTI Middleware	Conditions
Avaya DEFINITY G3	Intel CT Connect	
Avaya DEFINITY G3	Cisco ICM Enterprise CTI	Passive mode only
Aspect Call Center	Cisco ICM Enterprise CTI	Passive mode only
Nortel Meridian	Intel CT Connect	
Nortel Meridian	Cisco ICM Enterprise CTI	Passive mode only

Note: PBX/ACD switch and CTI middleware support depends upon an active certification program. Additional switch/CTI middleware combinations may be supported. Verify platform support, switch and middleware release dependencies with your Oracle Sales, Consulting or Support representative.

3

Dependency Requirements and Verification

This section describes the following dependency requirements:

- Mandatory Dependencies such as ERP, CRM and third-party applications that must be implemented prior to implementing Oracle Advanced Inbound.
- Installation and Dependency Verification, an ERP and CRM functional checklist that indicates tasks to perform to ensure that mandatory dependencies are installed, implemented and/or set up correctly.

3.1 Mandatory Dependencies

Oracle Telephony Manager is dependent on the proper installation of Oracle Call Center Connectors, a CTI server product included in the Oracle Advanced Inbound product module group. Oracle Call Center Connectors integrates the customer's approved third-party CTI middleware to the Oracle Telephony Manager server. For complete details on installing the Oracle Call Center Connectors server see *Installing Oracle Call Center Connectors*.

3.2 Conditional Dependencies

The following functions are dependent upon the installation of the respective product applications.

Table 3–1 Functions and Conditional Dependencies

Functionality	Dependency
TeleService screen pop	Oracle TeleService (Customer Care)
TeleSales screen pop	Oracle TeleSales
Web Callback	Oracle *i*Support or Oracle *i*Store

Table 3–1 Functions and Conditional Dependencies (Cont.)

Functionality	Dependency
Web Collaboration	Oracle *i*Meeting
Multisite call and data transfer	Intel CT Connect Enterprise Edition or Cisco ICM

3.3 Installation and Dependency Verification

Since the proper implementation of Oracle Telephony Manager is dependent on the proper versions and installation of third-party customer-provided equipment for requisite CTI functionality the following considerations should be considered prior to beginning the implementation:

- ❏ Does the Customer have a PBX/ACD switch that has been certified by Oracle?
- ❏ Is the PBX/ACD a model and software release that has been certified and does it have the proper PBX-based CTI interfaces or links?
- ❏ Has the customer purchased and installed/implemented an approved third-party CTI middleware?
- ❏ Has the PBX and CTI middleware been fully tested and is it operational on the customer's ethernet LAN?

4

Implementation Overview

4.1 Process Description

Prerequisites for implementing Oracle Advanced Inbound include installing and configuring Oracle Call Center Connectors, and installing and implementing the Oracle Interaction Center servers and server groups.

Implementation of Oracle Advanced Inbound involves creating a user identity and configuring telesets, routing, classifications and the IVR Integration Feature of Oracle Inbound Telephony Server.

4.2 Implementation Task Sequence

The following table provides an overview of setting up Oracle Telephony Manager. The Tab Name(s) column shows you in which tab(s) to perform the procedure, and whether the window is available only if you use a specific responsibility or product.

Table 4–1 Implementation Task Sequence

Step Number	Required or Optional	Description	Tab Name(s)
❑ 1	Required	Install Interaction Center Server Manager (ICSM) on each target machine. See *Oracle Applications Interaction Center Implementation Guide*	ICSM > Setup
❑ 2	Required	Define the Oracle interaction center server group. See *Oracle Applications Interaction Center Implementation Guide*	ICSM > Server Group
❑ 3	Required	Define and configure the Oracle interaction center server processes. See *Oracle Applications Interaction Center Implementation Guide*	ICSM > Server Group
❑ 4	Required	Configure Oracle Universal Work Queue for inbound telephony. See *Oracle Universal Work Queue Implementation Guide*.	
❑ 5	Optional	Configuration for verification of steps 1 through 3, using switch simulator: ■ Define and configure the CTI middleware. ■ Define the interaction center route points. ■ Define the interaction center telesets	Call Center
❑ 6	Optional	Run verification using switch simulator See *Oracle Applications Interaction Center Implementation Guide*	Call Center
❑ 7	Required	Define and configure the CTI middleware.	Call Center > Middleware
❑ 8	Required	Define the interaction center route points.	Call Center > Route Point
❑ 9	Required	Define the interaction center telesets	Call Center > Teleset
❑ 10	Optional	Map the inbound call / IVR data to fields in Oracle Applications.	Call Center > IVR
❑ 11	Required for multisite feature	Define multisite configurations and multisite paths.	Call Center > Multisite, Call Center > Multisite Path

Table 4–1 Implementation Task Sequence (Cont.)

Step Number	Required or Optional	Description	Tab Name(s)
❑ 12	Required for active mode	Set up routing for inbound calls.	Route tab required, Oracle Workflow Builder optional
❑ 13	Required	Set up Classifications.	Classification
❑ 14	Optional	Set up media action for each media and classification.	UWQ Media Action
❑ 15	Required for telephony	Install Oracle Call Center Connectors and dependencies. See *Oracle Call Center Connectors Installation Guide.*	Call Center > Middleware

5

Implementation Tasks

The implementation tasks described in this section begin with step 7 in Table 4–1, Implementation Task Sequence.

Use the following post-installation procedures to implement Oracle Telephony Manager, routing and classifications.

- Configuring and Verifying by Using the Switch Simulator
- Configuring CTI Middlewares
- Configuring Route Points
- Configuring Telesets
- Mapping IVR Fields to Oracle Applications Fields
- Doing Mass Updates
- Configuring Multisites
- Configuring Multisite Paths
- Configuring Routing
- Configuring Classifications

5.1 Configuring and Verifying by Using the Switch Simulator

The switch simulator is a process that uses Intel CT Connect middleware to simulate a Nortel switch and the connection and message behavior of the Oracle Call Center Connectors Server. The switch simulator enables you to set up an interaction center without connecting to a real switch. Before you implement Oracle Advanced Inbound, use the following procedures to verify the implementation of the interaction center servers and integration with business applications.

This section contains the following topics:

5.1.1 Configuring CTI Middlewares for Use with the Switch Simulator

Use the following procedure to configure CTI middlewares for use with the switch simulator.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

At least one server group must have been configured.

Steps

1. Choose the Call Center tab.

   The CTI Middlewares page opens.

2. Choose a Server Group from the pop-up menu.

3. Choose **Create**.

   The CTI Middleware Details page opens.

4. Enter a unique Middleware Name.

5. Enter the IP Address and the Port number of the switch simulator for the server group that you selected in step 2. The IP Address must be in the format xxx.xxx.xxx.xxx, for example, 255.255.255.255.

6. Choose **Connectors for CT Connect** as the middleware type from the pop-up menu.

7. Choose **Create** to save.

   The page refreshes. Hyperlinks appear for Teleset Details and Route Point Details, and fields appear for the Middleware Parameters.

8. Enter or choose only the Middleware Parameter Values that are listed in the following table. The switch simulator does not use any other Middleware Parameter fields.

Table 5–1 Switch Simulator Middleware Parameters

Field Name	Required	Value
PBX Name	Yes	nortel
PBX Type	Yes	Nortel Meridian
MiddlewareServerInfo1	Yes	ncacn_ip_tcp

9. Choose **Update** to save.
10. Optionally, you may choose the hyperlinks to Associate and Configure Telesets or Associate and Configure Route Points.

    This procedure is complete.

5.1.2 Configuring Route Points for Use with the Switch Simulator

Use the following procedure to configure route points for use with the switch simulator.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

- At least one server group must have been created.
- At least one CTI middleware must have been created.

Steps

1. Choose the Call Center > Middleware tabs.

   The CTI Middlewares page opens.
2. Choose the Configuration Name that you want to configure.

The Middleware Details page opens.

3. Choose Associate and configure route points.

   The Route Point Summary page opens.

4. Verify that the correct Server Group and Middleware Name are selected.

5. Choose **Create**.

   The Route Point Summary page opens.

6. Choose **Create**.

   The Route Point Details page opens.

7. In the Route Point Number field, enter the extension number of the route point.

8. Optionally, enter a Description.

9. Verify that the correct Server Group Name and Middleware Name are selected.

10. Optionally, if you do not want this route point to be monitored by the Inbound Telephony Server, choose Unmonitored.

11. Choose **Create** to save.

    The page refreshes and the Parameter Details fields appear.

    Note: Do not enter values into the Parameter Details fields.

12. Choose **Update** to save.

    This procedure is complete.

5.1.3 Configuring Telesets for Use with the Switch Simulator

Use the following procedure to configure telesets for use with the switch simulator.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

- At least one server group must have been created.
- At least one CTI middleware must have been created.

Steps

1. Choose the Call Center > Teleset tabs.

   The Telesets page opens.

2. Choose the appropriate Server Group and Middleware.

   The page refreshes and lists the telesets assigned to the selected server group and CTI middleware.

3. Choose **Create**.

   The Teleset Details page opens.

4. Enter a descriptive Teleset Name.

5. Enter a unique Hardware Number, for example, 7701. The Hardware Number is typically the number of the physical teleset and is the same number used when logging into Oracle Universal Work Queue and the soft phone.

6. From the Teleset Type pop-up menu, choose a teleset type.

7. Verify that the correct server group is selected.

   OR

   From the Server Group Name pop-up menu, choose a server group.

8. In the Middleware Name field, verify that the correct CTI middleware is selected.

   OR

   From the Middleware Name pop-up menu, choose a CTI middleware.

9. Choose **Create**.

   The page refreshes and the Line Details fields appear. The selected Teleset Type determines the number of available lines.

10. In Line Index 1, enter a number that is different from the Hardware Number, for example 8701.

11. In Line Index 2, enter the Hardware Number, for example 7701.

12. Choose **Update** to save.

    This procedure is complete.

5.2 Configuring CTI Middlewares

The CTI middleware definition contains the information required for Oracle Advanced Inbound to communicate with a switch (for example, Nortel Meridian r25 with Meridian Link Services v4) via CTI middleware (for example, Intel CT Connect or Cisco ICM) and Oracle Call Center Connectors. A middleware definition is associated with a server group.

You can define multiple middleware definitions (for example, a middleware definition for use with a switch and a middleware definition for use with the Switch Simulator server). However, to use a specific middleware definition in the operation of the interaction center, you must specify the name of the middleware definition in the MIDDLEWARE_CONFIG parameter for the Oracle Telephony Manager and Inbound Telephony Servers in the server group. For more information, see *Oracle Applications Interaction Center Implementation Guide*.

Use the following procedure to configure CTI middlewares.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

- Install and implement Oracle Call Center Connectors. See *Oracle Call Center Connectors Implementation Guide*.
- At least one server group must have been configured.

Steps

1. Choose the Call Center tab.

   The CTI Middlewares page opens.

2. Choose a Server Group from the pop-up menu.
3. Choose **Create**.

The CTI Middleware Details page opens.

4. Enter a unique Middleware Name.
5. Enter the IP Address of the Oracle Call Center Connectors server. The IP Address must be in the format xxx.xxx.xxx.xxx, for example, 255.255.255.255.
6. Enter the Port number of the Oracle Call Center Connectors server.
7. Choose a Middleware Type from the pop-up menu.
8. Choose **Create** to save.

   The page refreshes. The Middleware Parameters fields and the Teleset Details and Route Point Details hyperlinks appear.
9. In the Value fields, enter values for the Middleware Parameters. For most fields, if you enter invalid values, an error message advises you on entering a correct value. Check that you enter the correct IP address format and port number.
   a. For Intel CT Connect, enter the middleware parameter values that are listed in the following table.

      OR

      For Cisco ICM, proceed to step 9b.

Table 5–2 Middleware Parameters for Intel CT Connect

Field Name	Required	Description	Sample Value
PBX Name	Required	Link logical identifier defined in CT Connect configuration to represent the CTI link between CT Connect and the switch.	ctc_nortel ctc_lucent
PBX Type	Required	Choose a PBX Type from the pop-up menu.	Avaya Definity
Route Point Set 1 through 5	Deprecated	Route points are now configured in the Route Points tab. Any values that appear in these fields must be manually transferred to the Route Points tab.	
CTI Enabler Server IP Address	Required	IP address of the CT Connect server.	123.45.67.89
Middleware Server Info 1 through 6	NA	Middleware server Info 1 through 6 are no longer used for Intel CT Connect.	
Outgoing Prefix	Required	Numeric prefix dialed to place outside calls. Check against the configuration of the PBX	9
International Dialing Prefix	Required	Numeric prefix dialed for placing international calls	011 (from within the USA)
Site Area Code	Required	Area code for the site where the PBX is located	650

Table 5–2 Middleware Parameters for Intel CT Connect (Cont.)

Field Name	Required	Description	Sample Value
Site Country Code	Required	Country code for the site where the PBX is located	1
Site Internal Number Length	Required	Number of digits in an internal extension for the PBX	4
Site Local Number Maximum Length	Required	Maximum number of digits in a local phone number (excluding area code, country code and any outgoing prefix)	7 (for USA)
Site Overlay	Optional	(US only) Enter TRUE if 10-digit dialing is required for the site, otherwise enter FALSE or leave blank.	FALSE
IVR Host	Required for IVR integration	IP address of the IVR host that sends the data packets.	987.65.43.21
IVR Port	Required for IVR integration	Integer between 1024 through 65535. It should be the same number used by the IVR Host to send packets.	
IVR Info 1 through 3	Required for IVR integration		
IVRI Mode	Required for IVR integration	Either server or client.	Server
IVRI Abandon Threshold	Required for IVR integration	Number of seconds (usually five to ten) used to mark a packet as stale. This value should be greater than the time for a call to transfer from the IVR to the route point and ITS.	5
Domestic Dialing Prefix	Required	Numeric prefix dialed for placing domestic long distance calls	1 (for USA)
Passive Mode	Optional	Bypasses routing rules.	False
Use Advanced Outbound	Required whenever VDU boards are housed on the node	Indicates that the Call Center Connector server is being used for Oracle Advanced Outbound.	Yes
Predictive Transfer Flag	Required for Advanced Outbound	Set to Event. Single Step indicates how the predictive call will be transferred. Time is currently not implemented.	Event
Predictive Transfer Wait Time	Not available	This function has not yet been implemented.	
Predictive Answer Flag	Required for Advanced Outbound	Specifies how the predictive call will be answered.	Event
Predictive Answer Wait Time	Not available	This function has not yet been implemented.	

b. For Cisco ICM, enter the middleware parameter values that are listed in the following table.

Table 5–3 Middleware Parameters for Cisco ICM (GeoTel)

Field Name	Required	Description	Sample Value
PBX Name	Required	Peripheral ID defined in Cisco ICM CTI server for the PBX of interest.	5000
PBX Type	Required	Choose a PBX Type from the pop-up menu.	Avaya Definity
Route Point Set 1 through 5	Deprecated	Active mode is not supported for Cisco ICM. Route Point configuration is unnecessary.	
CTI Enabler Server IP Address	Required	IP address of the Cisco ICM CTI server (Server A).	123.45.67.89
Middleware Server Info 1	Required	Port number of the Cisco ICM CTI server (Port A).	42027
Middleware Server Info 2	Required	IP address of the Cisco ICM CTI server (Server B).	123.45.67.90
Middleware Server Info 3	Required	Port number of the Cisco ICM CTI server (Port B).	43027
Middleware Server Info 4	Optional	So that values can be used for classification, routing, and/or page pops, Oracle Call Center Connectors must register these variables with the Cisco ICM CTI Server to receive Extended Call Context (ECC) variables in telephony events from Cisco ICM. Enter a comma-separated list of Extended Call Context (ECC) variables in this field.	user.var1, user.var2
Middleware Server Info 5	Required	Oracle Call Center Connectors needs to store data in an ICM Call Variable (Peripheral Variable). Use a value from 1 to 10 to specify which call (peripheral) variable that Oracle Call Center Connectors will use in this field.	5
Middleware Server Info 6	Unused		
Outgoing Prefix	Required	Numeric prefix dialed to place an outside call. Check against the configuration of the PBX.	9
International Dialing Prefix	Required	Numeric prefix dialed for placing international calls.	011
Site Area Code	Required	Area code for the site where the PBX is located.	650
Site Country Code	Required	Country code for the site where the PBX is located.	1
Site Internal Number Length	Required	Number of digits in an internal extension for the PBX	4
Site Local Number Maximum Length	Required	Maximum number of digits in a local phone number (excluding the area code, country code and any outgoing prefix)	7 (for USA)
Site Overlay	Optional	(USA only) Enter TRUE if 10-digit dialing is required for the site, otherwise enter FALSE or leave blank.	FALSE

Table 5–3 Middleware Parameters for Cisco ICM (GeoTel) (Cont.)

Field Name	Required	Description	Sample Value
IVR Host	Required for IVR integration	IP address of the IVR host that sends the data packets.	987.65.43.21
IVR Port	Required for IVR integration	Integer between 1024 through 65535. It should be the same number used by the IVR Host to send packets.	
IVR Info 1 through 3	Required for IVR integration		
IVRI Mode	Required for IVR integration	Either server or client.	Server
IVRI Abandon Threshold	Required for IVR integration	Number of seconds (usually five to ten) used to mark a packet as stale. This value should be greater than the time for a call to transfer from the IVR to the route point and ITS.	5
Domestic Dialing Prefix	Required	Numeric prefix dialed for placing domestic long distance calls	1 (for USA)
Passive Mode	Required	Bypasses routing rules.	False
Use Advanced Outbound	Required whenever VDU boards are housed on the node	Indicates that the Oracle Call Center Connectors server is being used for Oracle Advanced Outbound.	Yes
Predictive Transfer Flag	Required for Advanced Outbound	Set to Event. Single Step indicates how the predictive call will be transferred. Time is currently not implemented.	Event
Predictive Transfer Wait Time	Not available	This function has not yet been implemented.	
Predictive Answer Flag	Required for Advanced Outbound	Specifies how the predictive call will be answered.	Event
Predictive Answer Wait Time	Not available	This function has not yet been implemented.	

10. Choose **Update** to save.
11. Optionally, you may choose the hyperlinks to Associate and Configure Telesets or Associate and Configure Route Points, respectively.

    This procedure is complete.

5.3 Configuring Route Points

Use the following procedure to configure route points.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

- At least one server group must have been created.
- At least one CTI middleware must have been created.

Steps

1. Choose the Call Center > Route Point tabs.

   The Route Point Summary page opens.

2. Verify that the correct Server Group and Middleware Name are selected.
3. Choose **Create**.

   The Route Point Details page opens.

4. In the Route Point Number field, enter the route point extension number.
5. Optionally, enter a Description.
6. Verify that the correct Server Group Name and Middleware Name are selected.
7. Optionally, if you do not want this route point to be monitored by the Inbound Telephony Server, choose Unmonitored.
8. Choose **Create** to save.

   The page refreshes and the Parameter Details fields appear.

9. For Nortel Meridian with CT Connect only, in the Immediate Treatment field, specify the immediate treatment of inbound calls arriving at this route point CDN (Control Directory Number). Enter ##R for ringback, ##M for music, or ##S for silence.
10. For Nortel Meridian with CT Connect only, if music treatment (##S) is specified in step 10, in the Music Route Number field specify the route number of a music

source configured in the Meridian PBX. Enter # followed by a two-digit route number, for example, #02.

11. Choose **Update** to save.

    This procedure is complete.

5.4 Configuring Telesets

The teleset definition contains information about a physical telephone in the interaction center. There should be one teleset definition for each physical telephone. A teleset definition is associated with a server group and CTI middleware.

Use the following procedure to configure telesets.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

- At least one server group must have been created.
- At least one CTI middleware must have been created.

Steps

1. Choose the Call Center > Teleset tabs.

   The Telesets page opens.

2. Choose the appropriate Server Group and Middleware.

   The page refreshes and lists the telesets assigned to the selected server group and CTI middleware.

3. Choose **Create**.

   The Teleset Details page opens.

4. Enter a descriptive Teleset Name.

5. Enter a unique Hardware Number. The Hardware Number is typically the number of the physical teleset and is the same number used when logging into Oracle Universal Work Queue and the soft phone.
6. From the Teleset Type pop-up menu, choose a teleset type.
7. Verify that the correct server group is selected.

   OR

   From the Server Group Name pop-up menu, choose a server group.
8. Verify that the correct CTI middleware is selected.

   OR

   From the Middleware Name pop-up menu, choose a CTI middleware.
9. Choose **Create**.

   The page refreshes and the Line Details fields appear. The selected Teleset Type determines the number of available teleset lines.
10. In the Extension fields, enter the teleset line extension numbers. Use the following table to determine the number of teleset lines required for each teleset type.

Note: Configure the exact number of specified lines.

Table 5–4 Teleset Line Configurations

Teleset	Required Line Configuration
Alcatel	Two lines for each teleset. Enter the same teleset extension number in the Extension field for Line Index 1 and Line Index 2.
Aspect	Three lines for each teleset. Enter the same instrument number in the Extension for all line indexes.
Avaya (Lucent)	Two OR three lines for each teleset — as many lines as there are call appearances on the actual teleset. Enter the same teleset extension number (station number) in the Extension field for all line indexes.
Cisco Call Manager	Three lines for each teleset. Enter the same teleset extension number for all line indexes

Table 5–4 Teleset Line Configurations (Cont.)

Teleset	Required Line Configuration
Ericsson	Three lines for each teleset. ■ For Line Indexes 1 and 2, enter the same ODN (Own Directory Number) in the Extension field. ■ For Line Index 3, enter the ADN (Additional Directory Number) in the Extension field.
Nortel	Two lines for each teleset. ■ Cisco ICM—For Line Indexes 1 and 2, enter the ACD DN in the Extension fields. ■ Intel CT Connect—For Line Index 1, enter the DN (Directory Number) in the Extension field. This corresponds to the Single Call Ringing key on the actual teleset. ■ Intel CT Connect—For Line Index 2, enter the ACD DN in the Extension field. This corresponds to the Automatic Call Distribution key on the actual teleset.
Rockwell	Intel CT Connect—Three lines for each teleset. Enter the same LWN (Logical Workstation Number) for all line indexes.
Siemens	One line for each teleset. Enter the teleset extension number in the Extension field for Line Index 1.

11. Choose **Update** to save.

    This procedure is complete.

5.5 Mapping IVR Fields to Oracle Applications Fields

An IVR mapping definition maps a specific IVR variable name in the IVR data packet (for example, a customer identification number) to a record in Oracle Applications (for example CUSTOMER_ID).

Use the following procedure to map IVR fields to Oracle Applications fields.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

You must have defined at least one of each of the following.

- Server group
- CTI middleware
- Route point

Steps

1. Choose the Call Center > IVR tabs.

   The IVR Mappings page opens.

2. From the pop-up menus, choose the appropriate Server Group, Middleware and Route Point.

   The page refreshes and lists the IVR fields for the selected server group.

3. In IVR Field, type the *case sensitive* name of an IVR data key name of your IVR system, for example, customer_number.

   Note: The IVR Field is case sensitive.

4. In the corresponding Oracle Field, choose the value that corresponds to the IVR Field that you entered in step 3, for example, Customer Number.
5. Repeat steps 3 and 4 for each IVR field.
6. Choose **Update** to save.

   This procedure is complete.

5.6 Doing Mass Updates

Mass updates apply to telesets and IVR Mappings. Mass updates for telesets involve moving from one CTI middleware configuration to another CTI middleware configuration. Mass updates for IVR mappings involve moving from one route point configuration to another route point configuration. The mass update function is available in the Teleset and IVR tabs.

This section contains the following topics:

Mass Updates of IVR Mappings

5.6.1 Mass Updates of Telesets

Use the following procedure to mass update telesets.

Prerequisites

- At least one server group must have been configured.
- For telesets, at least two CTI middlewares must have been configured.

Steps

1. Choose the Call Center > Teleset tabs.
2. The Telesets page opens.
3. Choose a Server Group and CTI middleware from the pop-up menus.

   The page refreshes, displaying a list of telesets.
4. In the Mass Update area, choose a Destination Server Group.

   The page refreshes, displaying a list of CTI middlewares.
5. Choose a Destination Middleware.
6. In the Select column, choose individual telesets for mass updating.

   OR

   To select all telesets, choose Select.

   Optionally, to move all the telesets, even those that are not displayed, choose Mass Update All. To move only the selected telesets, choose Mass Update.

   Note: If you choose Mass Update, the telesets that are not displayed will not be moved to the destination CTI middleware.

   This procedure is complete.

5.6.2 Mass Updates of IVR Mappings

Use the following procedure to mass update telesets.

Prerequisites

- At least one server group must have been configured.
- For IVR mappings, at least two route points must have been configured.

Steps

1. Choose the Call Center > IVR tabs.
2. Choose a Server Group, CTI middleware and a route point from the pop-up menus.

   The page refreshes, displaying a list of IVR mappings.
3. In the Mass Update area, choose a Destination Server Group.

   The page refreshes, displaying a list of CTI middlewares.
4. Choose a Destination Middleware.

   The page refreshes, displaying a list of route points.
5. Choose a Destination Route Point.
6. In the Select column, choose individual IVR mappings for mass updating.

   OR

   If you want to select all IVR mappings, choose Select.

   Optionally, to move all the IVR mappings, even those that are not displayed, choose Mass Update All. To move only the selected IVR mappings, choose Mass Update.

   This procedure is complete.

5.7 Configuring Multisites

A multisite configuration contains all information necessary to route and/or transfer a call from one site to another site.

Use the following procedure to configure interaction center multisites.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

At least two CTI middlewares must have been created.

Steps

1. Choose the Call Center > Multisite tabs.

   The Multisite Configuration Summary page opens.

2. Choose the appropriate server group and CTI middleware from the Choose Server Group and Choose Middleware pop-up menus.

   The page refreshes and lists the multisites assigned to the selected server group and CTI middleware.

3. Choose **Create**.

   The Multisite Details page opens.

4. To create a multisite configuration from one CTI middleware to another, use the following guidelines:

   - All fields are required.
   - The From middleware and To middleware must be different.
   - The Multisite Configuration Name must be unique and is limited to 128 characters.

5. Choose **Update** to save.

   The page refreshes and the Associate and Configure Multisite Path hyperlink appears.

6. Optionally, you may configure multisite paths by choosing the Associate and Configure Multisite Path hyperlink.

   This procedure is complete.

5.8 Configuring Multisite Paths

A multisite path represents a way to transfer a call from an outbound trunk of one site to an inbound trunk of another site, and contains the information, for example trunk prefix, for one particular way to route and/or transfer a call. To enable multisite features, you must set up both a multisite configuration and a multisite path.

In some cases, there may be more than one way to route and/or transfer a call from one site to another site, for example via tie line versus via PSTN. In such cases, you need to set up one multisite path for each carrier option.

> **Note:** In this release, currently 11.5.6, Oracle supports only one multisite path per multisite configuration.

Use the following procedure to configure multisite paths.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

- At least one multisite must have been created.
- At least one multisite configuration must have been created.
- At least one route point must have been configured for the destination server group in the multisite configuration.

Steps

1. Choose the Call Center > Multisite Path tabs.

   The Multisite Path Summary page opens.

2. Choose a Multisite Configuration from the -down menu.

   The page refreshes and lists the available Route Point Numbers.

3. Choose **Create**.

   The Multisite Path Details page opens.

4. Choose a Multisite Configuration from the pop-up menu.
5. Choose a Route Point Number from the pop-up menu.

   OR

   Leave this field blank.
6. Optionally, enter a Description.
7. Choose **Update**.

   The page refreshes and the Parameter Detail fields appear.
8. In the Parameter Details fields, enter a Value for the Prefix and the Suffix. For Prefix, enter the trunk access code for placing a call from the From site to the To site via a tie line, or enter the appropriate outgoing prefix for placing a call from the From site to the To site via the outbound trunk line. The Translation Route Dialed Number field is not used in the current release.
9. Choose **Update** to save.

   This procedure is complete.

5.9 Configuring Routing

Configuring routing in Oracle Telephony Manager requires understanding rule-based routing concepts and business requirements, and depends upon whether the route type is static, dynamic or a route point.

Use the following procedure to configure routes.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

None

Steps

1. Choose the Route tab.

   The Routes page opens.

2. Choose **Create**.

   The Route Details page opens.

3. Proceed to one of the following topics:

   - Configuring Static Routes
   - Configuring Dynamic Routes
   - Configuring Route Point Routes
   - Setting Route Priorities

5.9.1 Configuring Static Routes

Static routes are based on agents derived from Resource groups that are cached by the Routing Server.

Use the following procedure to configure static routes.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

- At least one Resource Group with a usage of Call Center should exist.
- Navigate to the Route Detail page. See "Configuring Routing."

Steps

1. In the Route Detail page, enter the Route Name. The Route Name is an arbitrary, descriptive name of the route.
2. In the Route Type pop-up menu, choose **Static**.
3. Optionally, in the Time-out field, enter a Value in seconds for the route. This value overrides any classification time-out for a route request.
4. In the Default Destination pop-up menu, choose a default route destination. If the routing server cannot determine agents from the defined destinations, then the server defaults to the selected Default Destination.

5. Optionally, enter a Description.
6. Choose **Update**.

   The page refreshes and the Static Destination, Route Rules and Route Filter Details fields appear.
7. Choose one or more destinations from the Static Destination drop down list.
8. In the Route Rules fields, create a route rule by choosing a Key and Operation from the Route Rules drop down lists and enter a Value, for example, "Language Competency Equals French" or "Customer Number Begins With 0." The available Operations depend on the selected Key. For a list of operators, see "Operators for Route Rules and Classification Rules."
9. In the Route Filter Details, move one or more Available Filters (server groups) to the Filtered By column. Adding filters restricts the route results to the agents in the selected server groups.
10. Choose **Update** to save.

    This procedure is complete.

5.9.2 Configuring Dynamic Routes

Dynamic routes are based on the agents derived from a seeded routing workflow or custom PL/SQL function.

Use the following procedure to configure dynamic routes.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

Navigate to the Route Detail page. See "Configuring Routing."

Steps

1. In the Route Detail page, enter the Route Name. The Route Name is an arbitrary, descriptive name of the route.
2. In the Route Type pop-up menu, choose **Dynamic**.

3. Optionally, in the Time-out field, enter a Value for the route. This value overrides any classification time-out for a route request.
4. In the Default Destination pop-up menu, choose a default route destination. If the routing server cannot determine agents from the defined destinations, the server will default to the selected Default Destination.
5. Optionally, enter a Description.
6. Choose **Update**.

   The page refreshes and the Procedure Detail, Route Rules and Route Filter Details fields appear.
7. Enter a Procedure Name.

   OR

   Optionally, choose Use Default Workflow Procedure. The Default Workflow Procedure is the seeded routing workflow. If you use the Default Workflow Procedure, you do not need to enter any parameters, however, the Default Workflow Procedure is slower than static routes.

   Caution: Choosing the Default Workflow Procedure will clear the Parameters Detail fields of any data that you enter.

   If you chose Use Default Workflow Procedure, proceed to step 10.
8. If you did not choose the Default Workflow Procedure, in the Parameters table enter the Parameter and choose a Value from the pop-up menu. In the left Value field you can enter a fixed, hard-coded value or choose an Oracle value from the pop-up menu in the right Value field, for example, CUSTOMER_ID.
9. If you did not choose the Default Workflow Procedure, choose a Datatype and Direction from the pop-up menus.
10. In the Route Rules fields, create a route rule by choosing a Key and Operation from the Route Rules drop down lists and enter a Value, for example, "Language Competency Equals French" or "Customer Number Begins With 0." The available Operations depend on the selected Key. For a list of operators, see "Operators for Route Rules and Classification Rules."
11. In the Route Filter Details, move one or more Available Filters (server groups) to the Filtered By column. Adding filters restricts the route results to the agents that are listed in the selected server groups.

12. Choose **Update** to save.

    This procedure is complete.

5.9.3 Configuring Route Point Routes

Use Route Point routes if you want a call to be rerouted to a pre-defined route point.

Use the following procedure to configure route point routes.

Prerequisites

- At least one Route point must have been defined in the Call Center > Route Point tab.
- Navigate to the Route Detail page. See "Configuring Routing."

Steps

1. In the Route Detail page, enter the Route Name. The Route Name is an arbitrary, descriptive name of the route.
2. In the Route Type pop-up menu, choose **Route Point**.
3. Optionally, in the Time Out field, enter a Value for the route. This value overrides any classification time-out for a route request.
4. In the Default Destination pop-up menu, choose a default route destination. If the routing point destination is not valid, the server will default to the selected default destination.
5. Optionally, enter a Description.
6. Choose **Update**.

   The page refreshes and the Route Point Details and Route Rules fields appear.
7. Choose a route point from the Route Point pop-up menu.
8. In the Route Rules fields, create route rules by choosing a Key and Operation from the Route Rules drop down lists and enter a Value, for example, "Language Competency Equals French" or "Customer Number Begins With 0." The available Operations depend on the selected Key. For a list of operators, see "Operators for Route Rules and Classification Rules."
9. Choose **Update** to save.

   This procedure is complete.

5.9.4 Setting Route Priorities

To change the priority of a route, choose the Route tab and choose a priority from the Priority pop-up menu.

Changing the value of a route priority affects the values of other route priorities. If you increase the value of a priority, then the priorities of all the routes with a value equal to or greater than the original value decrease by one. If you decrease the value of a priority, then the value of all the routes with a value equal to or less than the original value increase by one. For example, if you decrease 6 to 3, then 3 increases to 4, 4 increases to 5, and so on. If you increase 3 to 6, then 4 decreases to 3, 3 decreases to 2, and so on.

5.10 Configuring Classifications

Classifications are of two types, literal classifications and database procedure classifications. Literal Classifications are based on user-defined strings. Database Procedure Classifications are based on deriving the value for Classification from a stored PL/SQL function.

This section contains the following topics:

5.10.1 Configuring Literal Classifications

Use the following procedure to configure literal classifications.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

None.

Steps

1. Choose the Classification tab.

The Classification page opens.

2. Choose **Create**.

   The Classification Detail page opens.

3. In the Classification field, enter a name for the classification.
4. In the Classification Type pop-up menu, choose **Literal**.
5. Enter the Time Out in seconds.
6. Choose **Update** to save.

   The page refreshes and the Classification Rules fields appear.

7. In the Classification Rules fields, create a classification rule by choosing a Key and Operation from the pop-up menus and entering a Value, for example, "Language Competency Equals French" or "Customer Number Begins With 0." The available Operations depend on the selected Key. For a list of operators, see "Operators for Route Rules and Classification Rules."
8. Choose **Update** to save.

   This procedure is complete.

5.10.2 Configuring Database Procedure Classifications

Database Procedure Classifications are based on deriving the value for Classification from a stored PL/SQL function whose return value is the Classification Value as a VARCHAR2, such as " Gold Service."

You can use the values returned by the PL/SQL function to set up route rules in the Route Rules tab, for example:

```
Function GET_CLASSIFICATION_FROM_ACCOUNT_CODE(Account_Code Varchar2) returns
Varchar2
```

If the above function can return any of the following based on the input <Account_ Code>: (Gold Service, Silver Service, Bronze Service), then in the Route Rules tab create route rules such as, "If Classification equals Gold Service, then send the call/email to GoldStaticGroup," or "If Classification equals Silver Service, then send the call/email to SilverStaticGroup."

Use the following procedure to configure database procedure classifications.

Log in

HTML Login URL

Responsibility

Call Center HTML Administration

Prerequisites

You must have created the database function that returns a classification.

Steps

1. Choose the Classification tab.

   The Classification page opens.

2. Choose **Create**.

   The Classification Detail page opens.

3. In the Classification field, enter the name of the stored database function whose return value is a VARCHAR2, such as "Gold Service."

4. In the Classification Type pop-up menu, choose **Database Procedure**.

5. Enter the Time Out in seconds.

6. Choose **Update**.

   The page refreshes and fields appear for the Default Database, Parameters and Classifications Rules.

7. Choose **Oracle** as the Default Database.

8. In the Parameters fields, enter one or more PL/SQL parameters that must be passed to the PL/SQL function that you defined in step 3.

9. In the Classification Rules fields, create a classification rule by choosing a Key and Operation from the pop-up menus and entering a Value, for example, "Language Competency Equals French" or "Customer Number Begins With 0." The available Operations depend on the selected Key. For a list of operators, see "Operators for Route Rules and Classification Rules."

   Classification rules are required for a routing classification that is determined by a database procedure because you might not always want to send to the database. If you want the rule to always work, then create a rule that is always true.

10. Choose **Update** to save.

    This procedure is complete.

6

Diagnostics and Troubleshooting

Refer to the following guidelines and procedures for help in diagnosing and troubleshooting the implementation of Oracle Advanced Inbound.

6.1 Common Implementation Errors

If Oracle Advanced Inbound does not run properly, check these common implementation errors.

- Call Center applications are tested at the same minipack level. When installing Oracle Interaction Center minipacks, verify that they are *all* on the same level. For example, if you are using CCT minipack R, you should also be using Oracle Universal Work Queue and IEO minipack R.
- Is your switch (ACD) CTI middleware version supported by Oracle? Check http://crm.us.oracle.com/products/11i/callcenter/advanced_inbound/CTI/ACD_Support_Current_2001.htm
- Are your third-party products running on site and communicating with each other (switch and CTI middleware)? Do you hear a dial tone?
- Has your business application (such as Customer Care) been installed and configured correctly prior to installing Oracle Advanced Inbound?
- Have you read the readme file and applied the latest minipack, including all pre-requisites? Check for additional patches at http://crmeast.us.oracle.com/newsite/release/patches.html, then follow the standard procedure and check the readmes.
- If an agent login fails, check the following:
  - When an agent logs in to Oracle Universal Work Queue, enter the "teleset hardware number" that is configured in the Call Center HTML Admin.

    - Verify that the telephony parameters for the agent are set properly in the resource manager
    - Verify that the physical teleset is idle and has no calls on it.
- Verify that the individual servers are configured and associated with the same (or correct) server group.
- Verify that only one Oracle Inbound Telephony Server is configured to the same switch route point, otherwise they will not be able to start.
- IEU profile values must be configured correctly to get the soft phone to pop up at agent login.
- For any soft phone problems or bugs, verify that the actual physical teleset can perform the desired action. For example, if the physical telephone cannot dial out, or does a two-step transfer, the soft phone will behave similarly.
- The call should be released (either by the agent or the customer) prior to ending the interaction, and an interaction must be ended before the next call can arrive.
- If routing is not configured, all calls are sent to all agents. If a particular agent never gets a call, but other agents do receive it, check the routing rules.
- If a blank screen pop appears, check the following conditions.
    - Is the customer set up correctly in Customer Care?
    - Use the Oracle Universal Work Queue diagnostic form, configured in the Oracle Universal Work Queue media action administration, to see whether ANI, DNIS or IVR data is being passed to the business application.
    - If the ANI, DNIS or IVR data is being passed to the business application, and the screen pop is blank, the issue is within the TeleService or TeleSales products or configuration.

6.2 Log Files and Error Messages

The following topics describe how to retrieve log files for troubleshooting issues with Oracle Advanced Inbound.

6.2.1 Enabling OTM and/or ITS Log Files

Use the following procedure to enable Oracle Telephony Manager and Inbound Telephony Server log files.

For Release 11.5.5, MP-K or earlier, in otm.ini and its.ini, add the following line:

```
log_level otm=5,its=5,requester=5
```

For Release 11.5.6, MP-L or later, in the Oracle Call Center Technology HTML Administration, choose ICSM > the Server Group Name > the Server Name > Advanced, and add the following value in the Server Arguments field:

```
-log_level verbose
```

6.2.2 Collecting Oracle Call Center Connectors Log Files

Use the following procedure to collect log files for Oracle Call Center Connectors.

See Also

Prerequisites

None

Steps

1. Download and unzip the file ot32cfg.zip in a directory on the Call Center Connectors machine.
2. Open the file ot32cfg.doc and follow its instructions.
3. During testing, make sure OpentelProxyServer logging is turned on all the way. Delete any old log files and restart OpenTelProxyServer service to generate a new log file.
4. After you resume production, return to the normal logging level and disable console mode for better performance. To disable console mode and log only critical errors to log files, uncheck all check boxes in the file ot32cfg.exe *except* "Logging" and "Important messages."

See Also

"Collecting Intel CT Connect Trace Files" in *Oracle Call Center Connectors Implementation Guide*.

6.2.3 Using Logs to Troubleshoot Soft Phone Issues

Troubleshooting soft phone issues involves collecting logs from Oracle Telephony Manager, Oracle Inbound Telephony Server, Oracle Call Center Connectors and any third-party products such as Intel CT Connect, and providing a step-by-step

description of agent actions to give Oracle Support the full picture of the particular call scenario that is causing the problem.

Use the following procedure to troubleshoot soft phone issues.

Prerequisites

None

Steps

1. Create a step-by-step procedure to reproduce the problem.
2. Perform the test procedure using only the physical telephones. If the problem occurs using only a physical telephone, contact the switch administrator.
3. Perform the test procedure using CTI middleware test utilities (for example Dialogic CtcTest or Cisco CTITest) and collect logs, such as CtcTest window outputs, ctcfull traces or CTITest window outputs. If the failure occurs only here, contact the switch administrator and/or CTI middleware Support.
4. Perform the test procedure using the Oracle Universal Work Queue soft phone and collect logs, for example, OTM logs, OpenTel logs, CtcTest window outputs, ctcfull traces and CTITest window outputs. If the failure occurs only here, contact Oracle Support and provide a full description of the test procedures and log files.

Note: You must perform step 2 and step 3 before Oracle Support can assist you.

7

Verifying the Implementation

7.1 Oracle Advanced Inbound Implementation Verification Tasks

Refer to the *Oracle Applications Interaction Center Implementation Guide* for procedures on verifying the implementation of Interaction Center Server Manager (ICSM).

A

Operators for Route Rules and Classification Rules

Operators for defining route rules and classification rules are available in drop-down menus in the Route tab and Classification tab, respectively, and in the Route Detail and Classification Detail screens.

Note: The availability of operators depends on the selected Key.

For specific data type operators, see one of the following topics:

- Operators for Data Type: String
- Operators for Data Type: Number
- Operators for Data Type: Date

A.1 Operators for Data Type: String

The following table lists and describes the operators for data type: string.

Table A–1 Operators for Data Type: String

Operator	The rule is evaluated to be true if the media item value for a given key …
begins with	Begins with the given string
contains	Contains the given string
does not contain	Does not contain the given string
does not equal	Does not match the given string

Table A–1 Operators for Data Type: String (Cont.)

Operator	The rule is evaluated to be true if the media item value for a given key …
does not exist in	Does not exist in the given string
ends with	Ends with the given string
equals	Matches the given string without any case restrictions
equals (Match Case)	Matches the given string with case restriction
exists in	Is a subset of any of the given strings (a simplified OR operator)

A.2 Operators for Data Type: Number

The following table lists and describes the operators for data type: number.

Table A–2 Operators for Data Type: Number

Operator	The rule is evaluated to be true if the media item value for a given key …
!=	Is not equal to the given value
<	Is lesser than the given value
<=	Is lesser than or equal to the given value
=	Is equal to the given value
>	Is greater than the given value
>=	Is greater than or equal to the given value
between	Is between the two given values
does not exist in	Does not match any of the given values
exists in	Matches any of the given values (a simplified OR operator)

A.3 Operators for Data Type: Date

The following table lists and describes the operators for data type: date.

Table A–3 Operators for Data Type: Date

Operator	The rule is evaluated to be true if the media item value for a date/time key is …
after(hh:mm:ss)	After the given time
before(hh:mm:ss)	Before the given time
between(hh:mm:ss-hh:mm:ss)	Between the given times
day of the week in (1,2,3,4,5,6,7)	Specific day/s, where 1=Sunday, 2=Monday, and so on.

Glossary

active mode

A routing mode in which Oracle Telephony Manager routes calls according to defined rules by using skill-based routing, a dynamic call routing intelligence that delivers inbound calls to an agent who is appropriately skilled to meet the needs of the caller. Active mode is the default mode of operation.

dynamic route

A route that is based on a PL/SQL query.

Interaction Center Server Manager (ICSM)

The only server process that is required to be explicitly started on each target machine, ICSM is responsible for starting, stopping and monitoring all the other Oracle Advanced Inbound server processes. The ICSM server processes are controlled by the Interaction Center Server HTML Administration.

Inbound Telephony Server (ITS)

The Oracle Interaction Center server that handles inbound telephony interactions. ITS supports the following features:

- (Active mode only) ITS enables enterprise data-based routing by listening for route queries offered by the CTI middleware and responding to them to instruct the switch where to route the call.
- ITS monitors calls arriving at route point(s)
- ITS detects calls that are abandoned at route point(s)
- ITS receives IVR data packets from the IVR

interaction center server

Any interaction center server, such as Oracle Interaction Queuing and Distribution, Oracle Universal Work Queue, Oracle Routing server and Oracle Inbound Telephony Server. Same as mid-tier server process and server process.

media controller

Software that bridges other systems or software with the underlying media hardware, for example, a PBX.

media queue

The interaction center component for queuing and distributing inbound media items. It stores inbound items such as telephone calls or e-mails in a queue and integrates with the routing module so that the items can be sent to a set of agents. The media queue provides an API to other modules, such as Oracle Universal Work Queue, for querying and manipulating items in the queue.

media item

A representation of a telephone call, e-mail, Web callback or any other type of media.

mid-tier server process

Any interaction center server, such as Interaction Queuing and Distribution, Oracle Universal Work Queue, Oracle Routing Server, Oracle Inbound Telephony Server, and Oracle Telephony Media Controller. Same as server process and interaction center server.

monitoring

The ability to view server status.

multisite

Interaction centers that work together across multiple physical locations.

multisite routing

The ability to route a call to agents who are located across multiple sites.

multisite queuing and distribution

A single system storing and maintaining agent queues across multiple sites.

multi-PBX

Support for multiple switches and middleware configurations by the same server.

passive mode

Passive mode bypasses routing rules. Passive mode is typically used when a call center prefers traditional ACD routing features and/or the statistics and reporting tools of a switch vendor. In passive mode, the ACD/PBX system completely handles the routing and queuing of inbound calls. Oracle Telephony Manager does not monitor or respond to routing requests from the switch, and skill-based routing is essentially inactive.

scalability

A measure of how well a software or hardware product is able to adapt to future business needs.

screen pop

A user interface presentation of customer data and product and service information that appears on an interaction center agent's monitor simultaneously with the customer's incoming telephone call.

server process

Any interaction center server, such as Interaction Queuing and Distribution, Oracle Universal Work Queue, Routing server, Oracle Inbound Telephony Server, and Oracle Telephony Media Controller. Same as mid-tier server process and interaction center server.

server status

Information on whether the server process is running or not, how long the server has been running, and so on.

site

A single geographic location where an interaction center is located. A site typically has a PBX and CTI middleware installed.

skill-based routing

A dynamic call routing intelligence that delivers inbound calls to an agent who is appropriately skilled to meet the needs of the caller.

static route

A route that is based on cached data.

super group

The topmost, parent server group in a hierarchy of server groups.

switch simulator

A process that uses Intel CT Connect middleware to simulate a Nortel switch and the connection and message behavior of the Oracle Call Center Connectors server. The switch simulator enables setting up an interaction center without connecting to a real switch.

target machine

The machine where mid-tier server processes are run. Same as node.

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