

Oracle® Call Center Intelligence

Concepts and Procedures

Release 11*i*

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- Did you find any errors?
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Preface

This manual describes using Oracle Call Center Intelligence.

Intended Audience

This manual is intended for consultants and system administrators who are interested in setting up and using Oracle Call Center Intelligence.

Structure

The Understanding Chapter explains the basic concepts and provides an overview of Oracle Call Center Intelligence.

The Using Chapter gives step by step instructions of using certain features of Oracle Call Center Intelligence.

Related Documents

For more information, see the following manuals:

- *Oracle Call Center Intelligence Implementation Guide Courseware*

Conventions

In this manual, Windows refers to the Windows95, Windows98, and the Windows NT operating systems.

Other Product One refers to Oracle Other Product One for Windows and Oracle Other Product One for UNIX software.

The SQL interface to Oracle Other Product One is referred to as SQL. This interface is the Oracle Other Product One implementation of the SQL standard ANSI X3.135-1992, ISO 9075:1992, commonly referred to as the ANSI/ISO SQL standard or SQL92.

In examples, an implied carriage return occurs at the end of each line, unless otherwise noted. You must press the Return key at the end of a line of input.

The following conventions are also used in this manual:

Convention	Meaning
. . .	Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.
...	Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted
boldface text	Boldface type in text indicates a term defined in the text, the glossary, or in both locations.
< >	Angle brackets enclose user-supplied names.
[]	Brackets enclose optional clauses from which you can choose one or none.

Understanding Oracle Call Center Intelligence

This document provides overview information about Oracle Call Center Intelligence's (ICI) business areas, measures, key concepts, and features and functions.

1.1 What is Oracle Call Center Intelligence?

Oracle Call Center Intelligence (ICI) is an Internet-ready performance-management application for Oracle Interaction Center applications. By merging interaction data with business data, the application can provide unique insight into the interaction center's operations and business results. Most importantly, ICI enables the management of customer interactions to more effectively coordinate with enterprise-wide goals and objectives.

1.2 A Strategic Call Center Reporting Solution

Most interaction center managers rely on a massive amount of statistics generated by their Automatic Call Distributor (ACD). This typically results in strong management of calls but weak management of customers. With interaction centers rapidly becoming customer focused, management needs a tool such as, Call Center Intelligence, which marshals not only call data but also personnel and business data through a common interface; hence, Call Center Intelligence.

1.3 Oracle Interaction Center Suite Components

- **Advanced Inbound (AI):** Enables inbound telephony, including media handling such as routing and queuing.

- **Advanced Outbound (AO):** Provides outbound campaign execution capabilities.
- **eMail Center (eMC):** Provides sophisticated e-mail interaction management capabilities.
- **Scripting:** Sophisticated authoring tool and execution engine for interaction scripting used for productivity, consistency, and training.
- **Universal Work Queue (UWQ):** Provides a unified view of and access to work across media types as well as assigned work such as tasks.
- **Interaction Blending:** Provides sophisticated service-level management capabilities across interaction channels.
- **Call Center Intelligence:** Provides reporting and analysis capabilities for measuring interaction center performance.
- **Interaction History:** Provides a unified mechanism for storing and tracking all interactions across all communication channels and CRM applications.
- **1-to-1 Fulfillment:** Provides the ability to automatically send documents and collateral over multiple communication channels (fax, e-mail, and paper mail).

This section describes each ICI report and its measures. Also, each report has a section that addresses its appropriate business questions and business scenario.

The report description, description of measures, business questions and business scenarios are designed to assist you in selecting the most appropriate ICI report for your situation at hand.

The Glossary, at the end of the book, provides you with a detailed definition of the terms used in the interaction centers. It also provides formulas, so you understand the manner by which ICI creates its data.

ICI reports are organized by the following categories:

- Abandon Call Reports
- Activity, Transfer, and Transaction Reports
- Call Answered Reports
- Occupancy and Utilization Reports
- Speed to Answer Report
- Summary Reports
- Time Reports

2.1 Abandon Call Reports

Abandoned calls are calls that the ACD (Automated Call Distribution) passess to the OTM (Oracle Telephony Manager), which the caller terminates before the agent answers.

In order for you to effectively minimize your abandon call activity, the following reports provide you with information regarding your abandon call activities:

2.1.1 Abandon Call Rate

You can use this report to analyze abandon calls, as a percentage of all calls received versus goal. The report displays measures pertaining to the actual number of calls offered, abandoned calls, as well as percentages and variances of abandon rates for the center with respect to its set goal.

The report focuses on the following measures:

- Number of Abandoned Calls
- Percentage of Abandoned Calls within Acceptable Limits

With this report, you can answer the following business questions:

- Are more calls than anticipated getting abandoned?
- Are the abandoned rates for the center within acceptable limits?

ICI uses the following formula to calculate abandon call rate:

Total calls abandoned / Number of Total Calls Offered

Business Scenario:

At the end of the day the supervisor runs the Abandon Call Rate Report. He notes that the abandon rate has increased sharply today -- exceeding the Goal he set for the center -- the activity could be the result of the new campaign that was launched today. He decides to review the routing rules for the center and increase staffing during the campaign period to counter this increase in abandon rates.

2.1.2 Abandon Calls Time Series

You can use this report to determine the total abandon calls over a specified time period.

The report focuses on the following measures:

Number of Abandoned Calls within a Specified Period

With this report, you can answer the following business questions:

- Is my abandon rate on the decline?

- Are more calls getting abandoned now than last month? Last Quarter? Last Year?

Business Scenario

At the end of the month, the supervisor runs the Abandon Calls Time Series Report. He notes that the number of abandoned calls are increasing; yet, the abandon rate has remained almost the same for the last three months. This indicates that the agents have shown an improvement over the last three months but still may need more staffing in the center.

2.1.3 Calls Answered Versus Abandon Calls

You would use this report to determine the daily activity of your interaction center's answered calls versus your abandoned calls.

The report focuses on the following measures:

- Period
- Calls Answered
- Calls Abandoned

With this report, you can answer the following business questions:

- How does my inbound call volume fluctuate throughout the day?
- How can I accurately staff my interaction center to meet the daily fluctuations?
- What business reasons account for the abandon rate peaks?
- Do I need to modify my agent's break schedules to address the abandon rate?
- Are the abandon peaks consistent?
- Do I need to add more agent?

Business Scenario:

At the end of the day, the supervisor reviews the Calls Answered versus Abandon Calls report.

He notices that his center has seen increasing call volumes offered and leveling average speed to answer times because the product launch campaign started to take hold. The additional head count decision he made last week supported the increased volumes and improved service levels within goals.

2.1.4 Wait to Abandon by Wait Range

You can analyze the length of time callers wait in queue before then hang-up. The data provided by this report can be used to evaluate a center's performance and speed-to-answer activities, which can be used to enhance customer satisfaction.

The report focuses on the following measures:

Number of Inbound Calls Abandoned within a Specified Time

With this report, you can answer the following business questions:

- Which wait range has the highest abandonment rate?
- At what point does the number of abandon call significantly increase?

Business Scenario:

At the end of the day, the supervisor runs the Wait to Abandon By Wait Range Report. He notes that the abandon rate increased sharply after the wait range of 100 - 140 seconds. He changes the length of wait range parameter to 5 seconds to better understand the threshold, after which most calls get abandoned. He notes that after 125 seconds, the abandon rate increases drastically to 85%. He decides to review the routing rules for the center to keep the wait times under two minutes.

2.1.5 Wait to Abandon by Center

You can use this report to determine the average wait to abandon by center. The report displays measures, such as the actual number of calls received.

The report focuses on the following measures:

Number of Inbound Calls Abandoned by Center

With this report, you can answer the following business questions:

- What is the average duration the callers wait before abandoning calls?
- Does the average wait to abandon change with increasing call volumes?

Business Scenario:

At the end of the day, the supervisor runs the Wait to Abandon by Center Report. He notes that the average wait to abandon is 30 seconds. He selects a different time

range (last month) and runs the same report. He notes that the average wait to abandon has decreased from the monthly average of 34 seconds. He notes that he must increase his service levels to meet the impatience levels of his callers.

2.2 Activity, Transfer, and Transaction Reports

The activity, transfer, and transaction reports provide details of all calls, time spent in various agent states, and the frequency of transferred calls.

In order for you to effectively manage your call activities, transfers, and transactions, use the following reports:

2.2.1 Average Agent Transaction Time

The Average Agent Transaction Time helps you analyze the amount of time an agent spends on a call. With this report, your interaction center manager can establish agent performance thresholds and manage by exception.

The thresholds or goals that your manager sets, provide a range of acceptable performance levels. The thresholds or goals also help identify top performing, who are consistent, quality-driven, and who have low or high talk or transaction times. Conversely, the thresholds and goals help identify agents who have high talk times and low quality service performance.

The report focuses on the following measures:

- Number of Calls Answered
- Average Talk Time
- Average Wrap-up time
- Calls Offered
- Transaction Time

The report can assist you in answering the following questions:

- How much time agents are spending in direct call activities?
- Are my agents adhering to goals for average talk and wrap times?

ICI uses the following formula to calculate average agent transaction time:

Talk Time + Wrap Time

Business Scenario:

At the end of the day, the supervisor runs the Average Agent Transaction Time report. He notes that his group has met the goals for average transaction times, but the wrap time averages are more than expected. This suggests that some of his agents may be finding it hard to navigate through the application, which suggests a need for refresher training for his group.

2.2.2 Average Caller Transaction Time

You can use the Average Caller Transaction Time report to determine the length of time it takes your agent to provide a customer solution. The data provided in this report helps the manager build high quality customer satisfaction by monitoring the customer queue time, transaction time, agent availability, and resolution time.

The report focuses on the following measures:

- Customer Queue Time
- Transaction Time
- Agent Availability
- Resolution Time

The report can assist you in answering the following questions:

- How much time is the caller spending with agents?
- Am I able to satisfy most of my callers at the IVR?
- Are my callers spending an inordinate amount of time on hold?
- Am I keeping caller transaction times within goal?

ICI uses the following formula to calculate average agent transaction time:

Route Time + Queue Time + Talk Time

Business Scenario:

At the end of the day, the supervisor runs the Average Caller Transaction Time report. He notes that his center has met the goals for average transaction times, but the hold time averages are more than expected. He decides to review the routing rules with his network manager.

2.2.3 Transferred Call Rate Versus Goal

Use the Transferred Call Rate versus Goal report to assist you in achieving excellent customer service by managing the setup of the interaction center's routing rules.

The report focuses on the following measures:

- Total Calls Offered
- Total Calls Transferred

The report can assist you in answering the following questions:

- Am I meeting my transferred call rate goals?
- Are my transferred call rates decreasing over time?

ICI uses the following formula to calculate transferred call rate versus goal:

Transfer Rate = (calls transferred / calls offered) x 100

Business Scenario:

At the end of the month, the supervisor runs the Transferred Call Rate versus Goal report. He notes that the transfer rate has decreased over the last month, suggesting that the routing rules have been set up in accordance to the skills of the agents; however, with the new campaign to sell laptops coming up, he will need to again review the agent allocations.

2.3 Occupancy and Utilization Reports

Interaction center managers must have agents available to handle incoming calls and make proper use of the agents' time. The manager's ability to execute efficient use of the agent's time and the handling of calls ensures a productive and viable interaction center.

In order for you to effectively manage your occupancy and utilization rates, use the following reports:

2.3.1 Occupancy Rate: Comparison (Group vs. Goal, Center vs. Goal)

You can use this report to analyze the occupancy rate of the agents in a group working in a particular center or across multiple centers and compare performance

and goal activities. The information gathered from this report can also assist you in deciding whether or not you need to train your employees for improvements.

The report focuses on the following measures:

- Time Spent per Activity
- Occupancy Rate versus Goal
- Percentage of Time Spent in each Activity
- Available Time
- Talk Time
- Wrap-up Time
- Idle Time

The report can assist you in answering the following questions:

- Is the occupancy rate of my group better than the goal set?
- Does the occupancy rate of my group or center compare favorably against other groups or centers?
- Do my agents have a better talk time percentage relative to other groups?
- Are my agents spending more time in wrapping up calls relative to other groups?

ICI uses the following formula to calculate occupancy rate:

$(\text{Call Time} / \text{Work Time}) * 100$

Business Scenario

At the end of the month, the call center supervisor runs the Occupancy Rate - Comparison report to judge the performance of the three agent groups of his center against the center averages of the Orlando Call Center.

He notes that all his groups had met the occupancy rate goal. He compares the times spent for each activity and notes that Mrs. Butterfinger's group had a higher percentage of wrap up time relative to other groups.

Mr. Zimmer's group, on the other hand, recorded a significantly lower percentage of wrap time suggesting the training that the agents of his group attended had a very positive effect. The supervisor decides to send the agents of Mrs. Butterfinger's

group to the same training program that the agents of Mr. Zimmer's group attended.

2.3.2 Utilization Rate: Comparison

You can use this report to analyze the rate of agents in a group and center, and you can compare the group's performance against other groups in the same center or other centers. With the date, you can evaluate performance levels versus the performance goals.

The report focuses on the following measures:

- Time Spent per Activity
- Percentage of Time Spent in each Activity
- Available Time
- Talk Time
- Wrap-up Time
- Idle Time

The report can assist you in answering the following questions:

- Is the occupancy rate of my group better than the goal set?
- Does the occupancy rate of my group or center compare favorably against other groups or centers?
- Do my agents have a better talk time percentage relative to other groups?
- Are my agents spending more time in wrapping up calls relative to other groups?

Business Scenario

At the end of the month, the call center supervisor runs the Utilization Rate - Comparison report to judge the performance of the three agent groups of his center against the center averages of the Orlando Call Center.

He notes that all his groups met the utilization rate goal. He compares the times spent for each activity and notes that Mrs. Butterfinger's group had a higher percentage of wrap up time relative to other groups.

Mr. Zimmer's group, on the other hand, recorded a significantly lower percentage of wrap time suggesting that the training the agents of his group attended had a

positive effect. The supervisor decides to send the agents of Mrs. Butterfinger's group to the same training program that Mr. Zimmer's agents attended.

2.4 Calls Answered Reports

Interaction center managers need to know the call arrival and the distribution of those calls.

In order for you to effectively manage the arrival and distribution of your calls, use the following reports:

2.4.1 Calls Answered

You can use the Calls Answered report to compare the number of calls received over a specified period of time.

The report focuses on the following measures:

- Calls Answered per Center
- Yearly Comparisons
- Monthly Comparisons

The report can assist you in answering the following questions:

- How many calls did my group answer?
- How did my group do compared to other groups in my center?
- How did my center perform relative to other centers?
- Am I answering more calls today than the average of last year?

ICI uses the following formula to calculate calls answered:

Calls Abandoned + Calls Answered

Business Scenario:

At the end of the month, the supervisor runs the Calls Answered Report. He notes that the number of calls answered by his group has shown a level trend. He compares the center's performance with another center to find that even though the trends are similar, the number of calls answered is much lower than the other centers. This could be because his agents have a lower utilization rate or the routing

efficiencies are low. The manager decides to review more reports to come to a definitive conclusion.

2.4.2 Calls Answered by Center

You can use this report to determine the number of calls answered and to evaluate your center's performance. The report can help you make decisions about staffing, routing, and performance issues.

The report focuses on the following measures:

- Number of Calls Answered
- Yearly Comparisons
- Monthly Comparisons

The report can assist you in answering the following questions:

- How many calls did my group answer?
- How did my group perform when compared to other groups on my center?
- Am I answering more calls today than the average of last year?

ICI uses the following formula to calculate calls answered by center:

Calls Abandoned by Center + Calls Answered by Center

Business Scenario:

At the end of the month, the supervisor runs the Calls Answered Report. He notes that the number of calls answered by his group has shown a level trend. He compares the group's performance with another group to find that even though the trends are similar, the number of calls answered is much lower than the other centers. This could be because his agents have a lower utilization rate or the routing efficiencies are low. The manager decides to review more reports to come to a definitive conclusion.

2.4.3 Calls Answered: Time Series

You can use this report to analyze the number of calls answered and evaluate the center's performance.

The report focuses on the following measures:

- Number of Calls Answered
- Yearly Comparisons
- Monthly Comparisons

The report can assist you in answering the following questions:

- How many calls did my group answer?
- How did my group do compared to other groups?
- How did my center do compared to other centers?
- Am I answering more calls today than the average of last year?

Business Scenario:

At the end of the month the supervisor runs the Calls Answered Report. He notes that the number of calls answered by his group has shown a level trend. He compares the center's performance with another center to find that even though the trends are similar, the number of calls answered is much lower than the other centers. This could be because his agents have a lower utilization rate or the routing efficiencies are low. The manager decides to review more reports to come to a definitive conclusion.

2.5 Speed to Answer Report

Speed to Answer Reports measure the total inbound call queue time.

Use the following reports to effectively manage inbound call queue time:

2.5.1 Average Speed to Answer

The Average Speed to Answer Report provides information regarding the interaction center's ability to answer incoming calls within a specified period of time. It provides a graphical display of the measures within its tabular data.

This report focuses on the following measures:

- Average Speed to Answer
- Goal
- Average Route Time

The report can help you answer the following business questions:

Are my average speed to answer time continually falling?

ICI uses the following formula to calculate average speed to answer:

Total Time in Queue / Total Number of Calls Answered

Business Scenario:

At the end of the week, the supervisor looks at the average speed to answer report. He notes that after the change was made to the routing rules last Tuesday, the average speed to answer has shown a marked improvement; however, he notes that the average speed to answer, although better than the prior 12 months average, has not yet reached the levels achieved last month. This suggests that there is further room for improvement in setting up of the routing rules. He notes that the number of calls answered during each day of this week have increased, which means that the effects of training his staff last week had a positive effect.

2.6 Summary Reports

Summary Reports look at the overall call metrics, such as, but not limited to, talk time and idle time.

To manage your call metrics, use the following reports:

2.6.1 Inbound Agent Summary

The Inbound Agent Summary Report can assist you in evaluating your agent's individual performance in relation to other agents in the group; evaluate agent group performance in relation to the interaction center; and evaluate rearranging the agent group based on their performance levels.

The report focuses on the following measures in the tabular data, which is also represented in a graph:

- Time Spent per Activity by Agent
- Call Times
- Call Time Percentage
- Call Time Variance
- Occupancy Rate

- Utilization Rate

You can use this report to help you answer the following business questions:

- Do certain agents take a longer time to wrap-up calls? If so, do I need to provide them with additional training in order to reduce the time to wrap-up calls?
- How much time does an agent spend per activity when compared to other agent's activity?
- How does agent satisfaction issues relate to long idle periods?
- Who are my top performing agents?
- Which group takes more calls when compared to the interaction center's average?
- How does the group occupancy or utilization rates relate to the interact center's rate?

Business Scenario

At the end of the week, the inbound supervisor reviews the Inbound Agent Summary report. He notices that his group has better than average occupancy rates and answers an average number of calls per staffed hour (e.g., logged in hour).

He scans the agent activity times on the graph and notices that Mrs. Butterfinger stands out as a stellar employee with the greatest talk time and relatively less wrap up time; he needs to be recognized.

He also notices that Mr. Zimmer had abnormally high wrap up times and talk times, which indicate that Mr. Zimmer is having trouble finding his way around the business application in closing the call and needs further training. Mr. Zimmer will immediately enroll him for TeleSales.

2.6.2 Inbound Interaction Center Summary

You would use the Inbound Interaction Center Summary report to determine call activities for a particular interaction center or across all interaction centers specified within a specified time period. The report helps you monitor inbound activities and call volumes for one interaction center or across multiple interaction centers.

The report focuses on the following measures that are represented in graphical format and tabular display:

- Time Spent per Activity
- Total Time and Percentage of Logged-in Time by Activity Type
- Abandoned Calls
- Calls Answered
- Calls Offered

The report assists you in answering the following business questions:

- Do I need additional staffing to handle increased call volumes?
- Is the center properly staffed to answer the calls logged in per hour?
- Do I have an increased of abandoned calls?
- Which centers have high amounts of call handling time?
- Do I need to provide training to those centers that have high talk time percentages?

Business Scenario:

At the end of the week, the supervisor reviews the Inbound Call Center Summary report against last week's report.

He notices that his center has seen increasing call volumes for offered and abandoned calls during the the last month. The product launch campaign started to take hold and might be the cause for the increasing volumes. The supervisor will add an additional head count next week to support increasing volumes and improve service levels.

The following week, he sees increased talk time percentages even though he increased staffing. He reviews existing product training materials, improve their quality, and trains his staff.

2.7 Time Reports

Time Reports provide report time metrics to a more granular level than that of the Summary Reports.

For more detail on report time metrics, use the following time reports:

2.7.1 Average Talk Time

You would use this report to analyze the agent's average talk time per call for your interaction center and agent's group level. The report tracks the agent or agent group's average talk time during a specified period. With this information, you can reduce your agent's average talk time to reduce cost and increase savings.

With this report, you can answer the following business questions:

Is my agent's average talk time increasing or decreasing?

ICI uses the following formula to calculate average talk time:

Total Talk Time / Number of Calls Answered

Business Scenario:

At the end of the week the interaction center supervisor reviews the average talk time report. Although the total calls answered this week is higher than last week, he is pleased to note that the average (and total) talk time for his group (or center) has significantly decreased. This means that he has been able to save much more money this week. After sending five of his agents to a training program last month, he notes a significant reduction of the average talk time for his group. He is close to meeting the goals set for his center.

2.7.2 Productive Time Versus Non-Productive Time: Agent Level

Use this report analyze the percentage of time spent in productive versus non-productive activities. The report can provide you with data for each agent in the group, and shows the percentages and the actual times spent in productive and non-productive activities for the group as a whole.

The report focuses on the following measures:

- Percentage of Productive Time versus Non Productive Time
- Actual Non-Productive Time
- Actual Productive Time

With this report, you can answer the following business questions:

- How productive are my agents?
- Which agent has the highest productive time-share?
- Which agent has the lowest productive time-share?

- Are my agents on an average spending more time in non-productive mode?

Business Scenario:

At the end of the day, the supervisor runs the Productive versus Non-productive Time - Agent Level report. He notes that Brook Zimmer productively spent most of his time. He runs the report with different time ranges to find that Brook Zimmer has consistently clocked the least non-productive time during the past two weeks. He decides to reward Brook with an additional \$50 bonus for the week.

2.7.3 Productive Time versus Non-Productive Time: Comparison

Use this report to manage productive and non productive times for both the group and the center as a percentage of logged-in time. You can use this report to help determine the group's performance relative to the center.

The report focuses on the following measures:

- Talk time
- Wrap time
- Idle time
- Other as a percentage of logged in time

With this report, you can answer the following business questions:

- Are my agents productively engaged with the customer?
- How has my group done relative to the center?
- Do my agents have more talk time than the center?

Business Scenario:

At the end of the day, the supervisor runs the Productive Versus Non-productive Time - Comparison report. He notes that the productive time for his group is below the center's average. He also notes the details of the various activities for his group and notices that the idle time of his group is much higher than the center's average. He needs to review his agent allocation.

2.7.4 Telephone Time

Use this report to manage the percentage of time spent in productive versus non-productive activities for an individual agent in a center and resource group.

The report focuses on the following measures:

- Available time
- Talk time
- Wrap time
- Idle time
- Other as a percentage of logged in time

With this report, you can answer the following business questions:

- How productively is Brook Zimmer engaged?
- What was the idle time percentage and actual for Brook Zimmer?

Business Scenario:

At the end of the day, the supervisor runs the Telephone Time report for Brook Zimmer, following a recommendation that he be rewarded for good performance. He notes that Brook Zimmer spent most of his time productively. He runs the report with different time ranges to find that Brook Zimmer has consistently clocked low non-productive time during the past two weeks. He decides to reward Brook with an additional \$50 bonus for the week.

Architecture

The BIS technology stack is a three-tiered architecture that allows you to use a single sign-on to access all BIS components. The three-tiered computing model includes the following:

- Client tier (tier 1) contains only a Java-enabled Web browser to view the reports.
- Application tier (tier 2) contains web application server, application server, reports server, Discoverer server, and BIS applications.
- Database tier (tier 3) contains the database and all of its modules: concurrent processing server, administration server, and the Oracle database.

The Call Center Intelligence 11i Architecture consists of the following:

- The Personal Homepage (PHP)
- Intelligence Reports
- Oracle R11i Business Applications and 8i Database Business views

3.1 Personal Home Page

The Personal Homepage (PHP) represents the Call Center Intelligence user interface. Using this work space, you can create a customized portal that contains the business data that you need to manage and monitor your business. From the PHP, you can access menus, reports, and workbooks. You can also use the PHP to access other Oracle Applications.

- **Navigate:** Contains the intelligence areas and applications for a specific BI user.
- **Charts:** Displays the trend graph for a particular business metric.
- **Favorites:** Contains personalized internal or external hyper-links for the Call Center Intelligence user.

3.2 Intelligence Reports

Call Center Intelligence leverages Oracle Reports 6.0, enabling the user to customize reports, or to develop new ones, to meet the individual requirements or preferences. It is designed for maximum flexibility and ease of use for reporting generation. Pre-defined parameters built on each report allows users to run complex queries simply by making selections from a calendar picker, list of values (LOV) and/or drop down boxes. Users have access to cross-drill capabilities that carry parameter selections made across reports.

3.3 Oracle R11i Business Applications and 8i Database Business Views

Oracle Applications represents the interface that you use to enter, update, delete, and query data in the database. The Oracle 8i database stores the data that is entered through Oracle Applications. Business Intelligence then uses predefined views based on the stored data as its major source of information.

Assume your company uses Oracle Telephony Manager and has also recently purchased Call Center Intelligence. Your company might use the `bix_interactions` view. This view is based on the underlying data stored in Oracle Telephony Manager, which resides in the Oracle 8i database. The `bix_interactions` view contains information about the wait to abandon by wait range.

3.4 Template Responsibilities

Call Center Intelligence comes pre-seeded with the following responsibilities:

Call Center Intelligence: Access to Business Intelligence Interaction Center Reports.

Call Center Intelligence Collection Manager: Access to schedule the CCI data collection concurrent programs to load data into summary tables.

3.5 Users

Before users can access their PHP, you must grant them access to specific responsibilities in Oracle Applications. Before you create users, you must set up the appropriate responsibilities for user access.

Consider the following when setting up user access:

A user can have many responsibilities.

Granting access to a responsibility enables access to its related menus and submenus.

You can create new responsibilities and menus based on pre-seeded values.

3.6 Security

Security is handled using the standard Oracle Applications security mode. This means that security is related to the application's responsibility that a user selects at the login time. A user can only view data and run the reports designated by the profile options, functions, and menus assigned to that responsibility. You administer security through the System Administrator responsibility in Oracle Applications.

Users can have multiple responsibilities, such as Marketing Intelligence, Customer Intelligence, Sales Intelligence, and Call Center Intelligence. The responsibilities that a user has access to will appear in the Navigate region of the user's personal homepage.

Planning the Implementation

As you plan the implementation of Oracle Business Intelligence for your enterprise, you decide on the configuration and architecture best suited for your business needs. Oracle Business Intelligence is supported for both the UNIX and Windows NT platforms.

4.1 Recommended Disk Space and Memory Requirements

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

Because memory and disk requirements vary from center to center, we do not have a specific requirement that tells you the amount of memory and disk space you will need to run Call Center Intelligence; however, you should consider the following:

- Number of Agents
- Number of Active Agents
- Number of Media (e.g., inbound and outbound)
- Call Volume (typically, one call occupies one row; and, if the call volume is high, the ICI tables will have more rows, thus using more disk space.)

Your DBA (DataBase Administrator) will be your best resource in determining the disk space and memory requirements for your center.

4.2 Identifying Components and Hardware for Implementation

Identify Oracle E-Business Applications intended for use by CRM Business Intelligence (see Dependencies). Choose the appropriate hardware required for the

components that you have identified, and determine your installation configuration.

4.3 Business Considerations

Ensure that the business requirements for implementation are well defined and thought through. Ensure that the implementers have attended CRM Business Intelligence implementation training, and use a phased approach for the implementation.

4.4 Implementing with a Proven Methodology

Oracle Application Implementation (AIM) is a proven, structured approach for implementing business solutions based on Oracle Applications.

Business requirements for implementation are most likely to be clearly defined when you use a proven methodology; and, the Oracle Application Implementation Methodology (AIM) is typically used for this purpose.

AIM is available to Oracle consultants and customers, and the training curriculum is up-to-date, with frequently scheduled classes.

4.5 Implementation Training

Implementation teams, whose principal members have not undergone specific CRM Business Intelligence implementation training, may have difficulties.

CRM Business Intelligence implementation requires a variety of skills, including Java, PL/SQL, Oracle 8i database, Oracle Reports 6i, system administration, server administration, integration, and troubleshooting skills.

Project scoping involves a clear understanding of the myriad skills required, as well as access to skilled resources.

Report Dependencies

Oracle Call Center Intelligence depends on other Oracle 11i products and components to obtain its reports. Its dependencies affect the product's implementation and ongoing operation.

When Call Center Intelligence is implemented, there are blank source tables that need to be populated from other Oracle applications. To implement Call Center Intelligence, you must activate its required dependencies from different libraries, modules, engines, and applications by ensuring Oracle 11i Applications have been installed.

5.1 Definition of Dependencies

Call Center Intelligence relies on the following applications to provide content:

CRM Foundation (JTF): stores the interaction history data which is used in Call Center Intelligence. Access to Resource Groups (JTF_RS_GROUP) schema is mandatory for Agent specific information.

Oracle Telephony Manager (OTM): Call Center Intelligence depends on OTM to report all call-related transactions

Universal Work Queue (UWQ): Captures agent log in and log out times.

The following table, Table 5-1, shows the ICI reports and their respective dependencies pertaining to JTF, OTM, UWQ, OTS (Oracle TeleSales) / CSC (Oracle Customer Care), OLTP Tables, and Summary Table.

Table 5-1

Report Name	JTF	OTM	UWQ	OTS / CSC	OLTP Table	Summary Table
Abandon Call Rate	x	x			<ul style="list-style-type: none"> ▪ jtf_ih_media_items ▪ jtf_ih_media_items_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Abandon Call Time Series	x	x			<ul style="list-style-type: none"> ▪ jtf_ih_media_items ▪ jtf_ih_media_items_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Calls Answered versus Calls Abandon	x	x			<ul style="list-style-type: none"> ▪ jtf_ih_media_items ▪ jtf_ih_media_items_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Wait to Abandon Range	x	x			<ul style="list-style-type: none"> ▪ jtf_ih_interactions ▪ jtf_ih_media_items ▪ jtf_ih_media_item_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys ▪ ieu_sh_sessions ▪ ieu_sh_activities 	bix_interactions
Wait to Abandon by Center	x	x			<ul style="list-style-type: none"> ▪ jtf_ih_media_items ▪ jtf_ih_media_items_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Average Agent Transaction Time	x	x		x	<ul style="list-style-type: none"> ▪ jtf_ih_media_items ▪ jtf_ih_media_items_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Average Caller Transaction Time	x	x			<ul style="list-style-type: none"> ▪ jtf_ih_media_items ▪ jtf_ih_media_items_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Transferred Call Rate versus Goal	x	x			<ul style="list-style-type: none"> ▪ jtf_ih_media_items ▪ jtf_ih_media_items_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls

Table 5-1

Report Name	JTF	OTM	UWQ	OTS / CSC	OLTP Table	Summary Table
Occupancy Rate	x	x	x	x	<ul style="list-style-type: none"> ■ jtf_ih_interactions ■ jtf_ih_media_items ■ jtf_ih_media_item_Ic_segs ■ jtf_ih_media_item_Ic_segs_tys ■ ieu_sh_sessions ■ ieu_sh_activities 	bix_sum_agent
Utilization Rate	x	x	x	x	<ul style="list-style-type: none"> ■ jtf_ih_interactions ■ jtf_ih_media_items ■ jtf_ih_media_item_Ic_segs ■ jtf_ih_media_item_Ic_segs_tys ■ ieu_sh_sessions ■ ieu_sh_activities 	bix_sum_agent
Calls Answered by Period	x	x			<ul style="list-style-type: none"> ■ jtf_ih_media_items ■ jtf_ih_media_items_Ic_segs ■ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Calls Answered by Center	x	x			<ul style="list-style-type: none"> ■ jtf_ih_media_items ■ jtf_ih_media_items_Ic_segs ■ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Calls Answered Time Series	x	x			<ul style="list-style-type: none"> ■ jtf_ih_media_items ■ jtf_ih_media_items_Ic_segs ■ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls
Average Speed to Answer	x	x			<ul style="list-style-type: none"> ■ jtf_ih_media_items ■ jtf_ih_media_items_Ic_segs ■ jtf_ih_media_item_Ic_segs_tys 	bix_sum_grp_cls

Table 5-1

Report Name	JTF	OTM	UWQ	OTS / CSC	OLTP Table	Summary Table
Inbound Agent Summary	x	x	x	x	<ul style="list-style-type: none"> ▪ jtf_ih_interactions ▪ jtf_ih_media_items ▪ jtf_ih_media_item_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys ▪ ieu_sh_sessions ▪ ieu_sh_activities 	bix_sum_agent
Inbound Interaction Center	x	x	x	x	<ul style="list-style-type: none"> ▪ jtf_ih_interactions ▪ jtf_ih_media_items ▪ jtf_ih_media_item_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys ▪ ieu_sh_sessions ▪ ieu_sh_activities 	bix_sum_agent
Average Talk Time	x	x	x	x	<ul style="list-style-type: none"> ▪ jtf_ih_interactions ▪ jtf_ih_media_items ▪ jtf_ih_media_item_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys ▪ ieu_sh_sessions ▪ ieu_sh_activities 	bix_sum_agent

Table 5-1

Report Name	JTF	OTM	UWQ	OTS / CSC	OLTP Table	Summary Table
Productive versus Non-Productive - Agent	x	x	x	x	<ul style="list-style-type: none"> ▪ jtf_ih_interactions ▪ jtf_ih_media_items ▪ jtf_ih_media_item_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys ▪ ieu_sh_sessions ▪ ieu_sh_activities 	bix_sum_agent
Productive versus Non-Productive - Comparison	x	x	x	x	<ul style="list-style-type: none"> ▪ jtf_ih_interactions ▪ jtf_ih_media_items ▪ jtf_ih_media_item_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys ▪ ieu_sh_sessions ▪ ieu_sh_activities 	bix_sum_agent
Telephone Time	x	x	x	x	<ul style="list-style-type: none"> ▪ jtf_ih_interactions ▪ jtf_ih_media_items ▪ jtf_ih_media_item_Ic_segs ▪ jtf_ih_media_item_Ic_segs_tys ▪ ieu_sh_sessions ▪ ieu_sh_activities 	bix_sum_agent

Setting Up Oracle Call Center Intelligence

In order to enable UWQ to log agent related time measures (Available Time, Idle Time, Agent Log in Time) and allow ICI Reports to pull data, the following database server parameter must be set prior to completing the ICI set up steps:

Database Server Parameter : `ENABLE_SESSION_HISTORY`

Steps

1. Go to Call Center Admin..
2. Pull up your Server Group.
3. Goto the specific UWQ server.
4. Set (Database) Server Parameter - `ENABLE_SESSION_HISTORY` to TRUE at bottom of server tab.

The default value is FALSE. The database parameter has to be set to TRUE to enable this feature. Adding `enables_session_history` as one of the command line parameters automatically turns it on. The command line parameter overrides the database.

5. Click Save.
6. Restart services where UWQ is running.

After completing the aforementioned steps, you will need to perform the following activities for setting up ICI:

- Run concurrent programs related to reports.
- Submit a new request.
- Configure Oracle Reports Server.
- Set-up Self Server Web Application Home Page.

- Grant User Access.

6.1 Description of Call Center Intelligence Concurrent Programs

A concurrent program is a process that runs in the background while you continue working in an application. You submit a request to run concurrent programs through application forms, which insert a row into a database table that specifies the program to be run. A monitoring process reads the table and assigns the program to one of several concurrent managers running on the concurrent processing server. The concurrent manager then runs the program, which generates log and output files on the concurrent processing server.

The output of a concurrent program is stored on the concurrent processing server. When this output is requested, the report review agent passes the output file to the application server. From the application server, pages of the report are passed to the desktop client.

Call Center Intelligence reports display summarized business information. To view this summarized data, you must run the concurrent programs. These programs perform the following functions:

- Extract transactional data from tables
- Summarize the extracted data into Call Center Intelligence (BIX) summary tables

To access and run the concurrent programs, you must be logged in as a user with Call Center Intelligence Collection Manager responsibility. To run Call Center Intelligence Concurrent Programs, run the concurrent programs Load BIX_INTERACTIONS and Populate Agent Related Data. Then run Populate Call Center Intelligence Summary Tables.

To run Call Center Intelligence Concurrent Programs individually:

1. Navigate to the Submit Requests window.
2. Select the Single Request option.
3. Select the concurrent program from the list of values.
4. Submit your request.

6.2 Submitting a New Request

To access and run the concurrent programs, you must be logged in as a user with Call Center Intelligence Collection Manager responsibility. To run Call Center

Intelligence Concurrent Programs, run the concurrent programs Load BIX_INTERACTIONS and Populate Agent Related Data. Then run Populate Call Center Intelligence Summary Tables.

To run Call Center Intelligence Concurrent Programs individually:

7. Navigate to the Submit a New Request Window: (N) Request > Run.
8. Select the Single Request or Request Set option button.
9. Click OK.
10. Select the name of the request that you want to run from the list of values.
11. A Parameters window automatically appears if you select a request that requires parameter values. The prompts in the Parameters window are specific to the request that you select. The parameters you enter are concatenated and displayed in the Parameters field of the Submit Request window. Click OK after you have entered the parameters.

After CRM Business Intelligence is installed, you must perform the following steps prior to setting up the intelligence areas:

- Install Oracle Developer Reports and Graphics components
- Configure Oracle Reports Server
- Set up a self-service applications homepage
- Grant user access (shipped with predefined templates)

6.3 Configuring Oracle Reports Server

Make sure that WEBDB22 and WEBDB25 have been configured properly, and Oracle Report Server have been installed.

1. Login to your APPL_TOP environment.
2. Create a wrapper shell script for the rwcgi60 script and name it rwcgi_<your_instance>. Assuming that your reports server is located at /u08/repshr60/ following are the contents of the wrapper:

```
#!/bin/sh
```

```
ORACLE_HOME=/u08/repshr60; export ORACLE_HOME
```

```
## If you need more than one directory in your path, all directories should be
```

```
## separated by ':'
```

```

## If REPORTS60_NO_DUMMY_PRINTER is set, no printer needs to be set up
## for Reports Server.
PATH=$ORACLE_HOME/bin:"$PATH"; export PATH
LD_LIBRARY_PATH=$ORACLE_HOME/lib:/usr/openwin/lib:/usr/dt/lib;
export LD_LIBRARY_PATH
REPORTS60_NO_DUMMY_PRINTER=T;
export REPORTS60_NO_DUMMY_PRINTER
DISPLAY=<your display server>; export DISPLAY
## setting for reports runtime
## Reports Server looks in REPORTS60_PATH for reports to run
REPORTS60_PATH=$ORACLE_HOME/reports60:"$REPORTS60_PATH";
export REPORTS60_PATH
NLS_LANG=AMERICAN_AMERICA.WE8ISO8859P1; export NLS_LANG
REPORTS60_PHYSICAL_MAP=/u08/repdrv60/reports60/server/cache;
export REPORTS60_PHYSICAL_MAP
REPORTS60_VIRTUAL_MAP=cache;export REPORTS60_VIRTUAL_MAP
REPORTS60_CGIMAP=/u08/repdrv60/reports60/server/owscmd.dat;
export REPORTS60_CGIMAP
REPORTS60_SHARED_CACHE=NO;export REPORTS60_SHARED_CACHE
REPORTS60_COMMON_AUTH=common.htm;
export REPORTS60_COMMON_AUTH
REPORTS60_DB_AUTH=dbauth.htm;export REPORTS60_DB_AUTH
TNS_ADMIN=/etc ;export TNS_ADMIN
TWO_TASK=<your_instance>;export TWO_TASK
/u08/repdrv60/bin/rwsgi60

```

3. Go to /etc directory and create an entry in tnsnames.ora file as follows. Pick a name for your reports server, say rep_name and a port number and make the following entry:

```
<rep_name> = (ADDRESS=(PROTOCOL=tcp)(HOST=<your_
machine>)(PORT=<port#>))
```

4. Go to /u08/repdrv60/reports60/server directory and create an entry in the owscmd.dat file as follows:

```
<your_instance>_apps:server=<rep_name> userid=apps/apps@<your_instance>
destype=cache desformat=html %* tolerance=18000
```

```
<your_instance>_apps_mrc:server=<rep_name> userid=apps/apps@<your_
instance> destype=cache desformat=html %* tolerance=18000
```

5. Invoke the reports server after setting the following environment variables. It is recommended that a shell script be used in order to do this. Again assuming that your reports server is located at /u08/repdrv60 and your instance name is relqa03, following are the values that need to be set:

```
#!/bin/sh
```

```
ORACLE_HOME=/u08/repdrv60; export ORACLE_HOME
```

```
DISPLAY=<your display server>; export DISPLAY
```

```
PATH=$ORACLE_HOME/bin:$PATH; export PATH
```

```
LD_LIBRARY_PATH=$ORACLE_HOME/lib:/usr/openwin/lib:/usr/dt/lib;
```

```
export LD_LIBRARY_PATH
```

```
TNS_ADMIN=/etc ;export TNS_ADMIN
```

```
TWO_TASK=relqa03;export TWO_TASK
```

```
REPORTS60_PHYSICAL_MAP=/u08/repdrv60/reports60/server/cache;
```

```
export REPORTS60_PHYSICAL_MAP
```

```
REPORTS60_VIRTUAL_MAP=cache;export REPORTS60_VIRTUAL_MAP
```

```
REPORTS60_CGIMAP=/u08/repdrv60/reports60/server/owscmd.dat;
```

```
export REPORTS60_CGIMAP
```

```
REPORTS60_SHARED_CACHE=NO;export REPORTS60_SHARED_CACHE
```

```
REPORTS60_PATH=< path to where your reports, graphs and libraries are located
for eg:
```

```
/u08/code/relqa03/au/11.5.0/reports/US:/u08/code/relqa03/au/11.5.0/graphs:
/u08/code/relqa03/au/11.5.0/plsql>;
```

```
export REPORTS60_PATH
```

```
GRAPHICS60_PATH=$REPORTS60_PATH;export GRAPHICS60_PATH
ORAPLSQLLOADPATH=<path to where your pl/sql libraries that the graphs and
reports refer to are located for eg: /u08/code/relqa03/au/11.5.0/graphs>;
export ORAPLSQLLOADPATH
NLS_LANG=AMERICAN_AMERICA.WE8ISO8859P1; export NLS_LANG
REPORTS60_NO_DUMMY_PRINTER=T;
export REPORTS60_NO_DUMMY_PRINTER
REPORTS60_COMMON_AUTH=common.htm;
export REPORTS60_COMMON_AUTH
REPORTS60_DB_AUTH=dbauth.htm;export REPORTS60_DB_AUTH
echo $DISPLAY
echo $REPORTS60_PATH
echo $GRAPHICS60_PATH
echo $ORAPLSQLLOADPATH
rwmts60 name=<rep_name> &
```

6. Once the reports server is up and running, log in to forms and verify that the following profile options are set:

ICX:Report Cache - http://<your machine>:<webdb22 port#>/cache

ICX:Report Format - HTML

ICX:Report Images - http://<your machine>:<webdb25 port#>/OA_MEDIA

ICX:Report Launcher - http://<your machine>:<webdb22 port#>/cgi-bin/<wrapper_name>

ICX:Report Link - http://<your machine>:<webdb25 port#>/<your_db_name>

ICX:Report Server - <rep_name>

Also check ICX Language - must be US English

7. Login to SSWA to verify that the reports can be viewed.

References:

Refer to the following for more information:

· <http://Metalink.Oracle.Com>

6.4 Setting up Self Server Web Application Home Page

The following list provides a brief description of the OSSWA profile options that you must set up in the Oracle Applications System Administration.

- Applications Web Agent: Identifies the location of the Web agent (http://your_web_server:port/<plsql_cartridge_virtual_path>/).
- ICX: Report Images: Is embedded into the HTML report output so that reports can include standard image files(http://your_web_server:port/OA_MEDIA).
- ICX: Report Launcher: Identifies the Report Server that will run reports and produce the HTML output (http://your_web_server:port/cgi-bin/rwcgi60).
- ICX: Report Link: This value is embedded into the HTML report output so that reports can include drill down links to other reports. This is similar to the value you enter when modifying the Sign On window. <reports instance name> is defined in tnsnames.ora file (http://your_web_server:port/<plsql_cartridge_virtual_path>/)
- ICX: Report Server: Provides the name of the Report Server service [REPSERV] that you created on the Report Server (http://<reports_instance_name>).
- ICX: Limit Connect: Determines the maximum number of page hits per session.
- ICX: Limit Time: Determines the maximum number of hours a user can be logged on per session.
- ICX: Report Format: Determines the report output format. This value must be set to HTML.
- ICX: Report Cache: Identifies the virtual directory for Report Cache at the HTTP listener (http://your_web_server:port/cache/).
- ICX: Language: Determines the default language. This must be the same as the value in the ICX: Date Language.
- ICX: Date Language: Determines the default language in which dates are displayed and must be the same as the value in ICX:Language.
- ICX: Date Format Mask: Determines the date format mask to useDate Format Mask.
- ICX: Numeric Characters: Determines the characters to use to delimit numbers.
- ICX: Territory: Determines the geographical area.

Note: Consult the Oracle Self Service Web Applications Implementation Manual for detailed instructions on setting up these OSSWA profile options.

6.5 Granting User Access

If you do not want to use the responsibilities that are provided, you can create new responsibilities for accessing the Business Intelligence System.

1. Set the Oracle Self-Service Web Applications flag to True for the responsibilities provided and any new responsibilities you have created.
2. Assign Business Intelligence Systems responsibilities to those users who need to access the Business Intelligence System.

Administering Oracle Call Center Intelligence

7.1 Bouncing Reports Server

1. Telnet to the machine where the APPL_TOP is located (e.g., ap007sun)
2. `asu applrt.`
3. Change environment (e.g., `relnv code relvis03 u01`).
4. `cd` to reports home directory (e.g., `/u01/repsrv60`).
5. `ps -ef | grep rwmnts60`.
6. Get the process id (pid) of your reports server and `kill -9 <pid>`.
7. Confirm that the process is no longer running.
8. Start up the reports server by executing the shell script to set the environment variables as follows (check if one for your reports server already exists - most probably it does!!! In that case you just have to execute that script!! This script is usually located in Oracle Home for reports server (`/u08/repsrv60`) and is named the same as your instance). If not, go to your Oracle Home for the reports server (For example, `/u08/repsrv60`) and create a script preferably with your instance name (example `relqa03`), following are the values that need to be set:

```
#!/bin/sh
ORACLE_HOME=/u08/repsrv60; export ORACLE_HOME
DISPLAY=ifadswk2:0.0; export DISPLAY
PATH=$ORACLE_HOME/bin:$PATH; export PATH
```

```
LD_LIBRARY_PATH=$ORACLE_HOME/lib:/usr/openwin/lib:/usr/dt/lib;
export LD_LIBRARY_PATH
TNS_ADMIN=/etc ;export TNS_ADMIN
TWO_TASK=relqa03;export TWO_TASK
REPORTS60_PHYSICAL_MAP=/u08/repsrv60/reports60/server/cache;
export REPORTS60_PHYSICAL_MAP
REPORTS60_VIRTUAL_MAP=cache;export REPORTS60_VIRTUAL_MAP
REPORTS60_CGIMAP=/u08/repsrv60/reports60/server/owscmd.dat; export
REPORTS60_CGIMAP
REPORTS60_SHARED_CACHE=NO;export REPORTS60_SHARED_CACHE
REPORTS60_PATH=< path to where your reports, graphs and libraries are located
for eg:
/u08/code/relqa03/au/11.5.0/reports/US:/u08/code/relqa03/au/11.5.0/graphs:
/u08/code/relqa03/au/11.5.0/plsql>; export REPORTS60_PATH
GRAPHICS60_PATH=$REPORTS60_PATH;export GRAPHICS60_PATH
ORAPLSQLLOADPATH=<path to where your pl/sql libraries that the graphs and
reports refer to are located for eg: /u08/code/relqa03/au/11.5.0/graphs>; export
ORAPLSQLLOADPATH
NLS_LANG=AMERICAN_AMERICA.WE8ISO8859P1; export NLS_LANG
REPORTS60_NO_DUMMY_PRINTER=T; export REPORTS60_NO_DUMMY_
PRINTER
REPORTS60_COMMON_AUTH=common.htm; export REPORTS60_COMMON_
AUTH
REPORTS60_DB_AUTH=dbauth.htm;export REPORTS60_DB_AUTH
echo $DISPLAY
echo $REPORTS60_PATH
echo $GRAPHICS60_PATH
echo $ORAPLSQLLOADPATH
rwmts60 name=<rep_name> &
```

Troubleshooting

8.1 REP-1800 Error

I am getting REP-1800 Toolkit Initialization Error while trying to do a page setup in the reports builder ?

Set `TK_PRINT_STATUS` variable to "echo %n is valid"

This fixes the error where by people sometimes get error in the Reports Designer on toolkit initialization

8.2 REP-3000 Error

Make sure `DISPLAY` server is up and running.

Also, make sure the `ORAPLSQLLOADPATH` is set and pointing to the location of the Graphics PL-SQL library.

You can also verify your configuration with the following URL:

`http://<your-machine>:<webdb22 port#>/cgi-bin/`

`<wrapper>?<your_instance>_apps+report=<report_name>`

Glossary

Average Speed to Answer

Equal to the total time in queue divided by the total number of calls answered.

Average Queue Time

Equal to the total time in queue divided by the total number of calls that waited in queue.

Average Position Staffed

Average number of positions (agents) staffed (logged on) per skill during the interval.

Abandon Call Rate

Total calls abandoned / Number of Total Calls

Abandon Call

A call disconnected by the caller while in queue.

Idle Time

The time that an agent is logged in but not on a call and not available to take calls (e.g., Breaks, Lunch, and Training).

Available Time

The time that an agent waits for calls to arrive in an available state.

Calls Per Position

Average number of calls answered by each position (agent) during that interval.

Calls Answered/ Handled

A call is counted as answered when it reaches an agent.

Call Type / Application

A Specific type of contact, such as catalog sales or technical support for a particular product.

Contacts per Hour

Hourly average of right party contacts per agent.

Calls Offered

An internal metric for all calls presented to the center including abandoned and answered.

From Site

A Business rule defines if the call should be routed to another center other than the default i.e., From 8am to 5pm EST calls are handled by the Orlando support center, calls after 5 pm EST are handled by the Belmont Hills support center; hence, in this example, Belmont is the Too Site and Orlando is From Site.

Call Time

Talk Time + Wrap Time

Occupancy Rate

The percentage of time agents handle calls versus ready for calls to arrive
$$\text{Occupancy} = (\text{Call Time} / \text{Work Time}) * 100$$

Queue Time

The time that a caller spends waiting for an agent to answer the telephone after being placed in the queue by the ACD. Total time in queue divided by the total number of calls that waited in queue.

Route Time

The time from call offered to call routed.

Service Level

The percentage of incoming calls that are answered within a specified threshold:
"X% of calls answered in Y seconds.

Session Time

The time in which agents have signed on to UWQ (made their presence known), but may or may not be ready to receive calls.

Talk Time

The time an agent spends with a caller during a transaction. Includes everything from "hello" to "goodbye."

Utilization Rate

The percentage of time agents are ready to take calls versus session time.

Utilization

$(\text{Work Time} / \text{Session Time}) * 100$

Work Time

Available Time + Talk Time + Wrap Time

Wrap Time

The time after a call is hanged up that an agent needs to complete administrative work related to the call.

Work Time Percent

The percentage of Total time the agent spent handling calls.

