## **Oracle<sup>®</sup> Customer Intelligence**

Implementation Guide

Release 11*i* (11.5.7.01)

May 2002 Part No. A96693-02



Oracle Customer Intelligence Implementation Guide, Release 11i (11.5.7.01)

Part No. A96693-02

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#### Oracle Customer Intelligence Implementation Guide, Release 11*i* (11.5.7.01)

#### Part No. A96693-02

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## Preface

This implementation guide provides information and instructions to implement Oracle Customer Intelligence, Release 11*i*.

This preface explains how this guide is organized and introduces other information that can help you implement this product successfully.

## **Intended Audience**

Welcome to Release 11i of the Oracle Customer Intelligence Implementation Guide.

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

- The principles and customary practices of your business area.
- Oracle Customer Intelligence

If you have never used Oracle Customer Intelligence, Oracle suggests you attend one or more of the Oracle Customer Intelligence 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.

This guide is aimed at the following users:

 System Administrators (SA), Database Administrators (DBA), and others with similar responsibility

### Structure

This Oracle Customer Intelligence Implementation Guide consists of two chapters, provides overviews of the Oracle Customer Intelligence implementation and its components, as well as the application's relationship to other Oracle or third-party applications. It also provides process-oriented, task-based procedures for setting up the application.

#### **Chapter 1, Introduction to Oracle Customer Intelligence**

This section provides an overview of Oracle Customer Intelligence and its components. It explains the key concepts, features, and functions of this application.

#### **Chapter 2, Implementing Oracle Customer Intelligence**

This chapter provides general and detailed descriptions of the setup and configuration tasks required to implement the Oracle Customer Intelligence application successfully.

### **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 Customer Intelligence.

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 Customer Intelligence 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 Customer Intelligence.

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 Customer Intelligence (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 Customer Care Concepts and Procedures**

This guide describes how to use Oracle Customer Care. Oracle Customer Care provides the functionality for using the Customer Profiles, Contact Center, Relationship Plans and tracking critical customers.

#### **Oracle Customer Care Implementation Guide**

This guide provides information required for implementing and setting up Oracle Customer Care.

#### 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 the tasks given in the Installing Oracle Applications guide.

#### **Upgrading Oracle Applications**

Refer to this guide if you are upgrading your Oracle Applications Release 10.7 or Release 11.0 products to Release 11*i*. This guide describes the upgrade process and lists database and product-specific upgrade tasks. You must be either at Release 10.7

(NCA, SmartClient, or character mode) or Release 11.0, to upgrade to Release 11*i*. You cannot upgrade to Release 11*i* directly from releases prior to 10.7.

#### **Maintaining Oracle Applications**

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

#### **Oracle Applications System Administrator's Guide**

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

#### **Oracle Alert User's Guide**

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

#### **Oracle Applications Developer's Guide**

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

#### **Oracle Applications User Interface Standards for Forms-Based Products**

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

#### **Other Implementation Documentation**

#### **Oracle 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 Customer Intelligence 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 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 Customer Intelligence 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's 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 Customer Intelligence 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.

#### **OracleMetaLink**

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.

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## Introduction to Oracle Customer Intelligence

This chapter provides an overview of Oracle Customer Intelligence.

The following topics are covered in this chapter:

- Purpose for Implementing
- Overview of Oracle Customer Intelligence
- Architectural Overview
- Dependencies
  - For a Full Installation
  - For a Shared Installation
  - Mandatory Dependencies
  - Conditional Data Dependencies
- Report-Level Data Dependencies
- Performance Measures
- Performance Issues

## 1.1 Purpose for Implementing

A company's understanding of their customers is important in many respects. It provides companies with the ability to create a better forecasting models, cross-selling and up-selling opportunities, retention plans (to expand the customers' life cycle), customized care and service plans, and to simply know your customers better.

## 1.2 Overview of Oracle Customer Intelligence

Oracle Customer Intelligence is a customer information viewer that enables you to access enterprise-wide (360-degree) views of customer information. Oracle Customer Intelligence is an information viewing tool; you can use it to search for and view detailed enterprise-wide customer information. You can search for a specific customer, or a group of customers, through the Customer Search search feature.

Oracle Customer Intelligence is also an analytical tool that enables you to manage your customers by measuring customer profitability, acquisition, retention, satisfaction, lifecycle and loyalty, and analyzing impacts of these measurements on customer retention to maximize profitability. This product provides graphical representations of results from analytics for customer acquisition, customer profitability, customer retention, customer satisfaction, customer loyalty and customer lifecycle that you can view at a high level. You can get detailed information by drilling down to group of customer for a specific period and eventually to an individual customer. The analytical data can help you plan for better retention strategies, more efficient cross (or up) selling, and for streamlining your company's supply chain process.

For companies operating in today's competitive environment, having a comprehensive customer-oriented strategy is the key for your success. To maintain stability and growth of the business, companies need to have the following strategies: grow the customer base (acquisition); retain customers (retention); get current customers to stay longer and spend more (profitability). To achieve the latter two, you must also ensure your current customers are loyal and satisfied with the services and products you offer (loyalty and satisfaction).

#### **Questions to Ask Yourself**

To increase the revenue and maximize the profit, you need to answer the following questions.

- How many customers have we acquired in the past?
- Where do they come from (customer category, region, market segment, campaign, etc.)?
- What have they been buying?
- When did they buy?
- How often did they buy?
- How much did they buy?

- How profitable are they?
- Are they still buying from us? If so, why? If not, why not?
- How satisfied are our customers with our products and services?
- If they are not 100% satisfied, what has gone wrong?
- Among our customers, who is spending more, who is spending less, and who has defected?
- Considering customers as our most valuable asset, do we know the value of them?
- Among customers, who are the most valuable and who are the least valuable ones?
- What are the buying patterns, habits, and demographics of our customers?
- How can we leverage these information to recruit new customers and predict/influence customers' behaviors?
- Can we retrieve all the information and transaction history about a customer?

#### **Intended Audience**

Oracle Customer Intelligence is most helpful to the following users:

#### **Senior Executives**

View the performance of the entire enterprise, and search for any customer to gain insight for making strategic decisions.

#### **Middle Management**

Monitor the performance of their responsible operating units, and monitor the performance measures for identifying areas of improvement.

#### **Business Analyst**

Perform customer portfolio analysis to understand cause and effect relationship among measures, and gain an overview of typical business processes.

#### **Definitions of Various Customer Types**

#### **New Customer**

Account created for the first time during the attrition period.

#### **Re-activated Customer**

Account had at least one order during the attrition period; account acquired before the previous attrition period; and, an account that had no orders in the previous attrition period.

#### **Retained Customer**

Account that had at least one order during the attrition period and an account you acquired, or had at least one order, in the previous attrition period.

## **1.3 Architectural Overview**

Oracle Customer Intelligence is based upon a summary table-driven architecture; in addition, Customer Intelligence uses a web-enabled front-end applications for complex analysis.

The summary tables store key measures of customer acquisition, retention, profitability, satisfaction, loyalty, lifecycle, and information from other CRM and ERP databases using collection programs to ensure timely retrieval of data.

You can use the information in the summary tables to refresh collection programs at any frequency that you set up, but the minimum granularity of data stored will be monthly.

For security and logging into Oracle Customer Intelligence, you must access the PHP (Personal Home Page) architecture. You can configure the Homepage and allow users to view the information that you consider most important. Each user will be given a PHP to access all Oracle Business Intelligence Systems (BIS) applications. Included in the Homepage are the Performance Measures area, Navigator (to access other BIS products), Favorites (for a list of reports and/or URL links to user favorites), and Trend region (displays graphs from different BIS products).

Customer Intelligence uses Oracle Reports 6.0 to build reports, which are webenabled. You can view the reports using a standard web browser.

## 1.4 Dependencies

Oracle Customer Intelligence dependencies relate to other products and components. Its dependencies affect the product's implementation and ongoing operations. Because of this, you must install and set up all of the dependent components for Oracle Customer Intelligence.

In order to implement Oracle Customer Intelligence, you must activate its required dependencies from different libraries, modules, engines, and applications.

#### 1.4.1 For a Full Installation

This application is dependent on three basic areas of Oracle applications: Trading Community Architecture (TCA) for the customer master, Enterprise Resource Planning (ERP) for Invoices, Revenue, Billing, and General Ledger, and Customer Relationship Management (CRM) for Interactions, Quotes, Opportunities, Campaigns, Contracts, Service Requests, and Installed Base.

The following list displays the application short code and name that is required with a full installation.

- FND Application Object Library: FND forms are used to setup form functions, concurrent programs, menus, and responsibilities.
- AK Oracle Common Modules: AK forms are used to enter parameters, graph titles, and report column headings.
- AX Global Accounting Engine: The accounting periods and currency codes are used from AX.
- AZ Application Implementation
- BIS Oracle Applications Business Intelligence Systems (BIS): BIS is integrated and can be drilled across through hyperlinks.
- JTF CRM Foundation: JTF stores the interaction history data which is used in Customer Intelligence.

#### 1.4.2 For a Shared Installation

If you are implementing Oracle Customer Intelligence with shared installed products, the following list gives the short code and name of the applications a shared install includes:

AMS - Oracle Marketing

- AR Oracle Receivables
- AS Oracle Sales
- ASO Oracle Order Capture
- BOM Oracle Bills of Material
- CS Oracle Service (TeleService)
- CSC Oracle Customer Care
- HR Oracle Human Resources
- GL Oracle General Ledger
- OKS Oracle Contracts Service
- OM Oracle Order Management
- TCA Trading Community Architecture

#### 1.4.3 Mandatory Dependencies

The following dependencies are required for Oracle Customer Intelligence to work.

- Oracle General Ledger: Supports predefined currency and calendar to convert and display revenue and cost amounts. Currency API created by GL is also used by BIC to convert transactions.
- Oracle Receivables: Provides customer related information. Customer category must be set up in AR to be used as a dimension.

#### 1.4.4 Conditional Data Dependencies

The data dependencies fall into three categories: Trading Community Architecture (TCA) for the customer master, Enterprise Resource Planning (ERP) for Invoices, Revenue, Billing, and General Ledger, and Customer Relationship Management (CRM) for Interactions, Quotes, Opportunities, Campaigns, Contracts, Service Requests, and Installed Base.

ERP, CRM, and 3rd-Party applications that provide desired functionality to the product but are not required for the application to function (e.g., payment processing for an electronic store).

**Note:** Oracle Customer Intelligence will function without the conditional data dependencies, however, reports that require data from these applications will not work properly.

- AMS BIC uses AMS to report campaign related information. AMS should have Market Segment properly set up as a dimension to be used by BIC.
- AR BIC uses HZ (Trading Community Architecture) to source customerrelated information. HZ should have Customer Category properly set up as a dimension to be used by BIC. BIC also uses AR to report invoice-related information.
- AS BIC uses AS to report sales related information (quotes and opportunities).
- ASO BIC uses ASO to report order transactions and to calculate key measures such as acquisition, activation, retention, etc.
- BOM BIC uses BOM's table (CST\_BIS\_MARGIN\_SUMMARY) to source revenue, and costs information.
- CS BIC uses CS to report service related transactions and to calculate key measures such as satisfaction and loyalty.
- CSC BIC retrieves customer profile information from a pre-seeded profile group in CSC.
- GL BIC uses a.) a predefined period type and calendar in GL to display summary information in GL period buckets. And b.) a currency-conversion API created by GL is also used by BIC to convert transactions.
- OKS BIC uses OKS to report contract related information and to calculate key measures such as loyalty and satisfaction.

If certain dependencies are not implemented, the following items may not work properly.

- AMS BIC will miss all campaign related information and fail to use Market Segment properly as a dimension.
- AR BIC will not function without HZ (TCA). BIC will miss all invoice related information and may fail to calculate key measures such as loyalty and satisfaction. If the Customer Category is not properly set up, BIC will fail to use it as a dimension.
- AS BIC will miss all sales related information (quotes and opportunities).

- ASO BIC will miss all order transactions and fail to calculate key measures such as acquisition, activation, retention, etc.
- BIS Users will not be able to drill across to a report in a missing module.
- BOM BIC will miss revenue, costs, and profitability information without the table (CST\_BIS\_MARGIN\_SUMMARY) from BOM.
- CS BIC will miss all service related transactions and may fail to calculate key measures such as satisfaction and loyalty.
- CSC BIC will not be able to display customer profile information without CSC.
- OKS BIC will miss contract related information and fail to calculate key measures such as loyalty and satisfaction.

## 1.5 Report-Level Data Dependencies

The following is a table of the Customer Intelligence report dependencies.

Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Retention Analysis by Dimension	BICRTSEG.rdf	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ retention
Customer Retention Portfolio Analysis	BICRTDRL.rd f	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ retention
Profitability analysis for ALL (bar chart)	BICTMYOY	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ profitability

Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Profitability analysis by segment	BICTMSEG	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ profitability
Customer Revenue for ALL	BICTMYOY	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ revenue
Customer Revenue by segment	BICTMSEG	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ revenue

 Table 1–1
 Customer Intelligence Report Dependencies

Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
COGS for ALL	BICTMYOY	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ cogs
COGS by segment	BICTMSEG	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ cogs
Satisfaction summary for ALL (bar chart)	BICSTYOY	-	-	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ satisfaction

Table 1–1 Custome	r Intelligence Repor	t Dependencies
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Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Satisfaction summary by Segment	BICSTSEG	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ satisfaction
Customer Satisfaction Analysis by Satisfaction Index	BICSDYOY	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_customer_ summary_v
Customer Satisfaction Analysis - Service	BICSTSER	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_customer_ summary_v

Table 1–1	Customer Intelligence Report Dependencies
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Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Satisfaction Analysis - Shipment	BICSTSHP	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_customer_ summary_v
Customer Satisfaction Analysis - Billing	BICSTBIL	_	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_customer_ summary_v
Customer Satisfaction Analysis - Contract	BICSTCNT	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_customer_ summary_v

Table 1–1         Customer Intelligence Report Dependencies	
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Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Satisfaction Analysis - Quality	BICSTQLT	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_customer_ summary_v
Loyalty analysis for ALL (bar chart)	BICTMYOY	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ loyalty
Loyalty analysis by segment	BICTMSEG	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ loyalty

Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Loyalty Analysis by Loyalty Index	BICLINDS	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_customer_ summary_v
LifeCycle Analysis Distribution & Trend	BICLCYOY.rd f	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	-	bic_sumv_ lifecycle
LifeCycle Analysis Distribution	BICLCSEG.rdf	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	-	bic_sumv_ lifecycle

Table 1–1	Customer Intelligence Report Dependencies
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Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Acquisition for ALL (bar chart)	BICTMYOY	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ acquisition
Acquisition by segment	BICTMSEG	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	bic_customer_ summary_all	bic_sumv_ acquisition
Customer Activation Analysis - Year Over Year	BICTMYOY	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	-	bic_sumv_ activation

Table 1–1	Customer Intelligence Report Dependencies
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Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Activation Analysis by Dimension	BICTMSEG	-	Customer Summary Extraction (BICCSUMM)	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	-	bic_sumv_ activation
Customer List	BICCLIST	-	-	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	-	bic_cuslist_v bic_cuslist_ summary_v
Customer Account Information	BICADASH.r df	-	_	hz_cust_acct_ sites_all, hz_ party_sites, hz_locations, hz_cust_ accounts_all, hz_parties, ams_party_ market_ segments, gl_ periods	-	bic_sumv_ satisfaction, bic_sumv_ loyalty, bic_ sumv_ acquisition, bic_sumv_ profitability

Table 1–1 Customer Intelligence Report Dependencie
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Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Account Orders List	BICLORDS	-	-	aso_i_oe_ order_lines_ all hz_parties hz_cust_site_ uses_all hz_cust_acct_ sites_all hz_party_sites oe_ transaction_ types_tl mtl_system_ items	-	bic_orders_ summary_v bic_orders_ detail_v
Customer Account Order Detail	BICDORDS	-	-	oe_order_ lines_all hz_parties hz_cust_site_ uses_all hz_cust_acct_ sites_all hz_party_sites oe_ transaction_ types_tl mtl_system_ items	-	bic_orders_ summary_v bic_orders_ detail_v
Customer Account Interactions List	BICLINAC	-	-	hz_parties hz_cust_ accounts_all jtf_ih_ interactions jtf_ih_ activities jtf_ ih_outcomes_ tl jtf_ih_ reasons_tl jtf_ ih_results_tl	-	bic_parties_v bic_ interactions_v

 Table 1–1
 Customer Intelligence Report Dependencies

				i Dependencies	·	
Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Account Interaction Detail	BICDINAC	_	_	hz_parties hz_cust_ accounts_all jtf_ih_ interactions jtf_ih_ activities jtf_ ih_outcomes_ tl_jtf_ih_ reasons_tl_jtf_ ih_results_tl jtf_note_ contexts	-	bic_parties_v bic_ interactions_v bic_activities_ v jtf_note_ contexts_v
Customer transaction summary sales quotes	BICLSLQT	-	-	hz_parties hz_ cust_ accounts_all as_quotes_all	-	bic_parties_v bic_sales_ quotes_ summary_v
Customer transaction detail sales quotes	BICDSLQT	-	-	hz_parties hz_ cust_ accounts_all as_quotes_all as_quote_ lines_all oe_ transaction_ types_all hz_ cust_site_ uses_all _ hz_cust_acct_ sites_all_hz_ party_sites hz_locations	-	bic_parties_v bic_sales_ quotes_detail_ v oe_order_ types_v bic_ site_address_ v bic_ contacts_v bic_address_v
Customer transaction summaryrev enue	BICLREVE	-	-	hz_parties hz_ cust_ accounts_all ra_customer_ trx_all ra_ customer_trx_ lines_all ra_ cust_trx_line_ gl_dist_all	-	bic_parties_v bic_revenue_ trx_ summary_v

Iable 1–1 Customer Intelligence Report Dependencie	Table 1–1	Customer Intelligence Report Dependencies
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Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer transaction detailrevenu e	BICDREVE	-	-	hz_parties hz_ cust_ accounts_all ra_customer_ trx_lines_all mtl_system_ items	-	bic_parties_v bic_revenue_ trx_detail_v
Customer Account Invoices List	BICLINVS.rdf	-	-	ra_customer_ trx_all, ra_ customer_trx_ lines_all, ra_ terms, ra_ salesreps_all	-	bic_invlist_ v,bic_invline_ v
Customer Account Invoice Details	BICDINVS.rdf	-	-	ra_customer_ trx_all, ra_ customer_trx_ lines_all, ra_ terms, ra_ salesreps_all	-	bic_invlist_ v,bic_invline_ v
Customer Contacts	BICLCONT.rd f	-	-	hz_cust_ accounts_all , hz_parties , hz_party_ relationships , hz_org_ contacts , hz_ party_sites, hz_locations, hz_contact_ points	-	bic_contacts_ detail_v, bic_ address_v
Customer Account Campaigns List	BICLCAMP.rd f	-	-	hz_parties, hz_cust_ accounts_all, jtf_ih_ activities, ams_source_ codes, bic_ dimv_ operating_ units	-	bic_parties_v, bic_ campaign_ list_v, ams_ campaigns_vl, ams_ channels_vl, ams_media_vl

Table 1–1	Customer Intelligence Report Depen	dencies
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Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Account Campaign Details	BICDCAMP.r df	-	-	hz_parties, hz_cust_ accounts_all, ams_act_ offers, ams_ act_products	-	bic_parties_v, bic_ campaign_ list_v
Customer transaction summary service requests	BICLSRQS	-	-	cs_incidents_ all, cs_ incident_ severities, cs_ incident_ statuses, cs_ tasks	None	bic_service_ request_ summary_v, bic_parties_v
Customer transaction detail service requests	BICDSRQS	-	-	cs_incidents_ all, cs_ incident_ severities, cs_ incident_ statuses, cs_ tasks	None	bic_service_ request_ detail_v, jtf_ tasks_v, cs_ interactions_v
Customer transaction summary contracts	BICLCNTR	-	-	okc_k_ headers_b, okc_k_ headers_tl, okc_k_party_ roles_b	None	bic_contracts_ summary_v
Customer transaction detail contracts	BICDCNTR	-	-	okc_k_ headers_b, okc_k_ headers_tl, okc_k_party_ roles_b	None	bic_contracts_ detail_v
Customer Account Opportunities List	BICLOPPU.rd f	-	-	as_ promotions_ all	-	bic_opty_ summary_v,_ bic_parties_ v,_as_ statuses_vl, bic_contacts_ detail_v

Report Name	Report Rdf File Name	OLTP Applications Required	Concurrent Processes Required for Report	OLTP Tables Accessed	Summary Tables Accessed	Views Accessed
Customer Account Opportunity Details	BICDOPPU.rd f	-	-	as_ promotions_ all	-	bic_opty_ summary_v, bic_opty_ detail_v, bic_ contacts_ detail_v

Table 1–1	Customer Intelligence Report Dependencies
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## **1.6 Performance Measures**

The following table list the performance measures used in Oracle Customer Intelligence reports.

Display Name	Internal Name	Description	Dimensions
BIC Loyalty Measure	BIC_LOYALTY_ MEASURE	Measure for Loyalty	Organization,
			Time,
			Customer Category,
			Market Segment,
			Geography
BIC Profitability Measure	BIC_PROFITABILITY_ MEASURE	Measure for Profitability	Organization,
			Time,
			Customer Category,
			Market Segment,
			Geography

 Table 1–2
 Customer Intelligence Performance Measures Table

Display Name	Internal Name	Description	Dimensions
BIC Retention Measure	BIC_RETENTION_ MEASURE		Organization,
			Time,
			Customer Category,
			Market Segment,
			Geography
—	BIC_SATISFACTION_ MEASURE		Organization,
			Time,
			Customer Category,
			Market Segment,
			Geography

 Table 1–2
 Customer Intelligence Performance Measures Table

# Table 1–3Customer Intelligence Dimensions, Dimension Levels, PMF Views andReferred Tables

Dimension Name (Internal Name)	Dimension Level (Internal Name)	Level View	Tables Used by the View
Geography	City,	BIC_CITIES_V,	BIM_GEOGRAPHY
	State	BIC_STATES_V	
Customer Category	Total Customer Category,	BIC_TOTAL_CUST_	BIS_LEVELS,
	Customer Category	CATEGORY_V,	BIS_LEVELS_TL
		BIC_CUST_CATEGORY_ V	FND_LOOKUP_VALUES
Market Segment	Total Market Segment,	BIC_TOTAL_MARKET_ SEGMENT_V,	BIS_LEVELS,
	Market Segment		BIS_LEVELS_TL
			AMS_CELLS_ALL_TL,
		BIC_MARKET_ SEGMENT_V	AMS_CELLS_ALL_B
Geography	City,	BIC_CITIES_V,	BIM_GEOGRAPHY
	State	BIC_STATES_V	

Target Level Display Name	Target Level Internal Name	Alert	Process
BIC Loyalty Total	BIC_LOYALTY_TOTAL	BIC PMF LOYALTY ALERT	BIC Send Notification
BIC Profitability Total, BIC Profitability Customer	BIC_PROFITABILITY_ TOTAL BIC_PROFITABILITY_ CUSTOMER	BIC PMF PROFITABILITY ALERT	BIC Send Notification
BIC Retention Total	BIC_RETENTION_ TOTAL	BIC PMF RETENTION ALERT	BIC Send Notification
BIC Satisfaction Total	BIC_SATISFACTION_ TOTAL	BIC PMF SATISFACTION ALERT	BIC Send Notification

Table 1–4 Customer Intelligence Target Levels, Reports, Workflow, and Alerts

# 1.7 Performance Issues

### **Reports using Summary Tables**

Summary tables are used in Customer Intelligence to enhance performance of reports. Any report for a measure (stored in bic\_measures table), will use the data from bic\_customer\_summary. These reports would first populate a temporary table with the data for the report. This would be done by calling a stored package. The report itself will use a simple query to show the data from the temporary table. This is expected to result in acceptable performance.

The reports related to Profitability will use the table bic\_profitability\_summary. This table stores profitability with an extra dimension which is the item category.

If you do not want data from the summary table bic\_customer\_summary for past periods, you must purge the data from the summary table. Currently, no utility is available; and, to purge the data from the table, you must use SQL Plus.

### **Reports using OLTP Tables**

All reports that show transaction level information (e.g., order detail and customer lookup) will use data directly from the OLTP tables. Since these reports show one transaction at a time, performance should be good.

### **Matrix Reports**

Matrix reports showing charts will have to run the same query twice - once for the report and once for the chart. The reason behind the two queries is a technical obstacle of not being able to pass the data from a matrix report to a chart. The following reports will take double the time to run:

- Organizational
- Multi-organizational
- Language and currency

### Queries

When running queries for each month, tag your customers as New (1), Reactivated (2), or Retained (3) each month using attrition period.

2

# **Implementing Oracle Customer Intelligence**

## 2.1 Implementation Overview

Implementing Oracle Customer Intelligence requires four basic steps. Within these steps you will have the option to customize the application to meet your business needs. Most set ups are performed using an HTML interface. If there is a step that requires the Forms application, it will be indicated in the navigation path.

The following table outlines the Oracle Customer Intelligence implementation steps.

Step	Description		
1	Setting Up User Profiles		
2	Running a Concurrent Program (Extract Calendar)		
3	Configuring Measures		
3a	Activation and Retention		
3b	Lifecycle		
3c	Satisfaction Benchmark		
3d	Satisfaction		
3e	Loyalty		
3f	Enable / Disable Measures		
4	Running a Concurrent Program (Extract Customer Summary)		

# 2.2 Setting Up User Profiles

It is important to set up the profile options in Oracle Customer Intelligence so that the application works properly.

### Prerequisites

You will need a login to access the profile set ups.

### **HTML Navigation**

Login > Profile

### Responsibility

System Administrator

### Steps

- 1. Set up the following CRM BIS profiles:
  - **a.** BIC: Summary Extraction Date (BIC\_SMRY\_EXTRACTION\_DATE)

This profile option indicates the last date when you ran the extraction program. When you install the Customer product, set this date as the earliest one for which the various measures need to be calculated. You can set the profile option at the site level. During the execution of the Summary Extraction program, if the start date is not specified, the value of this profile option is used instead.

**b.** BIC: Number of Records in Customer Reports (BIC\_CUSTREP\_NUM)

This profile option indicates the number of records shown in the customer transaction summary reports (e.g. Orders List and Invoices List). You can set to any level. If you do not set the profile option and date range, the transaction summary reports will show all transactions. The default is 10.

**c.** BIC: Debug (BIC\_DEBUG)

This profile option is used to log debug messages in the BIC\_DEBUG table. The possible values are 'Y' (Yes) and 'N' (No). If you set the value to Y, the system logs debug messages in BIC\_DEBUG table when you run the reports. You can set at any level. The default is set to "No".

- 2. Set up the following CRM BIS profiles:
  - **d.** CRMBIS: Period Set Name

This profile option designates the type of Accounting Calendar used in concurrent programs to populate summary tables and the time dimension of reports. The calendar refers to the GL period set, for which different periods are defined. The default is Standard Accounting.

Refer to the Oracle General Ledger User Guide for the Accounting Calendar.

e. CRMBIS: Period Type

This profile option defines the lowest granularity of time at which you can collect and view data. This refers to the Period Types setup in the Accounting Calendar. The default is Month.

- **3.** Set up the following Service profile:
  - a. Service: Inventory Validation Organization

This value sets the default inventory organization identification number. with a default value of 'Null'.

# 2.3 Running a Concurrent Program

### Prerequisites

You will need a self service application login to run a concurrent program.

### **Forms Navigation**

Requests > Run

### Responsibility

Customer Intelligence Collection Manager

### Steps

Run the concurrent request "Extract Calendar". This will extract information from the General Ledger application onto the BIC schema.

**Note:** It is important that you run this concurrent program before you move to the next step, "Configuring Measures".

# 2.4 Configuring Measures

The following is a list of measures that you will need to configure to properly implement the application:

- Activation and Retention
- Lifecycle
- Satisfaction Benchmark
- Satisfaction
- Loyalty
- Enable / Disable Measures

### 2.4.1 Activation and Retention

This form allows you to specify the values which determine Customer Acquisition and Retention.

### **HTML Navigation**

Activation & Retention

### Responsibility

Customer Intelligence System Administrator

### Steps

**1.** Set up Activation Period.

Activation Period is the number of days allowed between the time a customer is acquired to the time the customer makes their first purchase.

**2.** Set up Attrition Period.

Attrition Period is the months of purchasing inactivity (since the last purchase) after which the customer is considered lost.

**3.** Set up Retention.

First Retention Period is the start date for the duration within which you want the system to calculate retention.

4. Click Update.

#### Figure 2–1 Activation and Retention Setup Screen

Activation and Retention Setup

*Activation Period: 30 Day	Activation Period is the length of period (measured in days) from the acquired date for a customer to activate S her account (through the customer's first purchase)
*Attrition Period: 6 Mon	Attrition period is the period length of purchase inactivity that signals an end to the business relationship. <sup>Ih</sup> Customers without buying for longer than this period are considered lost.
*Retention: 01-JAN-1998	First Retention Period is the earliest period you want the Customer Intelligence System to start calculating the customer retention rate.
Update	

### 2.4.2 Lifecycle

As customers are acquired, they start their business relationship with a company as new customers. Over time, customers are classified in one of the following patterns: spending more, remaining the same, greatly reducing spending, spending very little, or defecting to competitors. In other words, they are migrating through a customer lifecycle, which can be defined by the following stages:

- New: This is the period during which the customer is considered new.
- Growing: Use measure growth percentage and lifecycle factor to define a business rule for a 'growing' customer.
- Stable: This is the period during which the customer is neither growing nor declining.
- Declining: Use measure growth percentage and lifecycle factor to define a business rule for a 'declining' customer.
- Defected: Use measure growth percentage and lifecycle factor to define a business rule for a 'defected' customer.
- Insignificant: This is a threshold value used to determine whether or not the customer is significant.

### **Terms and Concepts**

The Lifecycle Factor is (Absolute difference in measure within comparison period) \* (Percent measure growth over the same period).

Measure Growth is the percent change in measure over a specified period.

These measures are important in categorizing customers because used together, the lifecycle factor and measure growth allow enterprises to measure not only the

percentage increases in level of business but also provide a "sanity check" in the form of an absolute threshold.

### **HTML Navigation**

Lifecycle

### Responsibility

Customer Intelligence System Administrator

### Figure 2–2 Lifecycle Setup Screen

#### Lifecycle Setup

Measure	Comparison Method	First Lifecycle Period		
<ul> <li>Revenue</li> <li>Number Of Orders</li> <li>Quantity Of Purchases</li> </ul>	⊙ Period Over Period ○ Year Over Year by Period	Period Jan ▼ Year 1998 ▼		
* New Customer Period 2	Months (Length of time when a cu	ustomer is deemed "New")		
Calculation Period Qua	Quarter 🔄 (Granularity level between two comparison periods)			
* Insignificant Level 1	(Level of purchase making custon	ner insignificant)		
Lifecycles	Measure Growth %	Life Cycle Factor		
*Defected	<= 🖌 3 AND	<= <b>v</b> 3		
*Growing	>= • 5 AND	>= • 50		
*Declining	<= • 5 AND	<= <b>•</b> 25		
(Update)				

### Steps

- **1.** Select the measure that you want to use for categorizing customers into different lifecycles by clicking a radio button:
  - **Revenue**: Total money received through sales of products and/or services
  - Number of Orders: The total number of orders placed
  - Quantity of Purchases: The total number of items purchased (one order can contain many items)
- 2. Select the period over which to compare the measure chosen in Step 1.

- Period Over Period (e.g., Q2 1999 vs. Q1 1999)
- Year Over Year by Period (e.g., Q1 2000 vs. Q1 1999)
- **3.** Determine the Calculation Period. Define the period type.

Customer Lifecycle is determined by comparing the same measures from two periods. Users can decide what granularity level to use for the two comparison periods.

- 4. Determine the lifecycle stages.
  - **a.** Enter a New Customer Period in months.

The New Customer Period is the length of time when a customer is deemed to be "New" after being acquired.

**b.** Enter a value for Insignificant Level.

The Insignificant Level is the level of purchases (revenue, number of orders, or quantity of purchases) that makes a customer insignificant to a company in both Comparison Periods.

- **c.** Enter values to define Defecting customers. Use measure growth percentage and lifecycle factor to define a business rule for a "Defected" customer.
- **d.** Enter values to define a Growing customer. Use measure growth percentage and lifecycle factor to define a business rule for a "Growing" customer.
- **e.** Enter values to define a Declining customer. Use measure growth percentage and lifecycle factor to define a business rule for a "Declining" customer.
- 5. Click Update.

### 2.4.3 Satisfaction Benchmark

This page is provided for entering the Customer Satisfaction Index values for the Industry Standard or Benchmark. Values are entered for each period and are shown in Satisfaction reports to compare against the actual values.

### **HTML Navigation**

Satisfaction Benchmark

### Responsibility

Customer Intelligence System Administrator

### Steps

Enter Standard Industry values for satisfaction, for each GL period as extracted by the concurrent program "Extract Calendar". Click **Update** to save your changes.

Figure 2–3 Satisfaction Benchmark Setup Screen

Satisfaction Benchmark Setup		Create
Per	iod Start Date	Standard Value
	OCT-1998	59
	JAN-1999	59.6
	APR-1999	60
	JUL-1999	61
	OCT-1999	61.5
	JAN-2000	62.3
	APR-2000	62.7
	JUL-2000	63
	OCT-2000	64
	JAN-2001	65.5
Update )	First   Previous 1 - 10 of 22 N	ext   Last

### 2.4.4 Satisfaction

Use this page to specify the weights for the sub-indexes that make up the Overall Satisfaction Index, a weighted average of the following: Billing, Contract, Product Quality, Product Shipment, and Service.

### **HTML Navigation**

Satisfaction

### Responsibility

Customer Intelligence System Administrator

Satisfaction Set	tup	
Operating Unit Vision Op	perations 💽	
Satisfaction Measu	res	
Measure	Description	Weight
Billing	Sub index of satisfaction	1
Contract	Sub index of satisfaction	2
Product Quality	Sub index of satisfaction	3
Product Shipment	Sub index of satisfaction	1
<u>Service</u>	Sub index of satisfaction	2
Update Back	Apply Buckets to All Operating Units	

### Figure 2–4 Satisfaction Setup:Sub-Index Weights Screen

### Steps

A sub-index is composed of the weighted average of several measures. For each sub-index you can specify the weight for each measure. For each measure, buckets can be created by specifying value ranges and scale points. Click **Update** to save your changes.

### How Measure Values Are Calculated

All measure values other than Satisfaction, Loyalty and Lifecycle, are calculated using a pre-defined SQL statement. Lifecycle is calculated based on the setup information as provided in the Lifecycle tab. Satisfaction and Loyalty also have sub-measures defined. For example, Billing, Contract, Product Quality, Product Shipping and Service are the first level, pre-seeded sub-measures for Satisfaction.

Satisfaction also has a second level of sub-measures that are pre-seeded, however, a user cannot add to this defined list. A SQL statement is associated with each sub-measure (last level in the hierarchy of sub-measures).

During implementation, the user defines several values: the weight for each of the measures and sub-measures, min and max values of the range and Points associated against each range for a sub-measure. These ranges are sometimes called 'buckets' and the points 'bucket points'. Finally, the sub-measures for Satisfaction and Loyalty can be enabled or disabled if necessary.

Based on this input, an algorithm is created then Satisfaction and Loyalty measures are calculated. The calculation will be similar for both measures.

For example, if a user enables the following sub-measures for Satisfaction:

- Billing and Service
- 2nd level sub-measures -
  - On time payment rate (drilldown from Billing),
  - Total payments (drilldown from Billing)
  - Average Closed Service Requests (drilldown from Service)
  - Average Daily Outstanding Service Requests (drilldown from Service)

If the weights specified for these sub-measures are:

- On time payment rate 5,
- Total payments 6,
- Average Closed Service Requests 7
- Average Daily Outstanding Service Requests 8

Then each sub-measure has a predefined SQL query associated with it; then these queries return the following values:

- Query value for On time payment rate is 1000,
- Query value for Total payments is 500,
- Query value for Average Closed Service Request is 2000,
- Query value for Average Daily Outstanding Service Request is 1500.

To summarize this setup:

Satisfaction:

Billing

On time payment rate

range 1000-2000 => points =10

range 2001-5000 => points =20

range 5001-10000 => points =30

Total payments

range 500-1000 => points =5

- range 1001-2000 => points =10
- range 2001-3000 => points =15

Contracts

Product Quality

Product Shipping

Service

Average Closed Service Request

range 1000-2000 => points =15

range 2001-5000 => points =20

range 5001-10000 => points 25

Average Daily Outstanding Service Request

range 1000-2000 => points 10

range 2001-5000 => points 15

range 5001-10000 => points 20

With these values, the user can calculate the sub-measures:

**Query value** for On time payment rate is 1000, which falls in the range 1000-2000, therefore the value of Bucket points is 10.

**Score** for On time payment rate = Weightage \* Bucket points i.e., 5\*10=50

**Query value** for Total payments is 500, which falls in the range 500-1000, therefore the value of Bucket points is 5.

**Score** for Total payments = Weightage \* Bucket points i.e., 6\*5=30

**Query value** for Average Closed Service Request is 2000, which falls in the range 1000-2000, therefore the value of Bucket points is 15.

**Score** for Average Closed Service Request = Weightage \* Bucket points i.e.,7\*15=95

**Query value** for Average Daily Outstanding Service Request is 1500, which falls in the range 1000-2000, therefore the value of Bucket points is 10.

**Score** for Average Daily Outstanding Service Request = Weightage \* Bucket points i.e., 8\*10=80

Billing is then calculated as:

**Value** = (Score of On time payment rate + Score of Total payments) / (Weightage of On time payment rate + Weightage of Total payments) = (50 + 30) / (5+6)

**Score** = (Value for Billing) \* Weightage for Billing = ((50+30)/(5+6)) \* Weightage for Billing

Similarly Service will be calculated as:

**Value** = (Score of Average Closed Service Request + Score of Average Daily Outstanding Service Request) / (Weightage of Average Closed Service Request + Weightage of Average Daily Outstanding Service Request) = (95 + 80) / (7+8)

**Score** = (Value for Service) \* Weightage for Service= ((95+80)/(7+8)) \* Weightage for Service

Satisfaction Measure value is calculated as:

(Score of Billing + Score of Service) / (Weightage of Billing + Weightage of Service)

**Satisfaction** = ((Value for Billing \* Weightage for Billing) + (Value for Service \* Weightage for Service))/ (Weightage of Billing + Weightage of Service)

Loyalty calculation is very similar to Satisfaction, with only one variation, Loyalty does not have second level sub-measures.

### 2.4.5 Loyalty

This page allows you to specify the range of values and weights (importance of values) for the seeded Loyalty measures. For each measure, buckets can be created by specifying value ranges and the scale points.

### **HTML Navigation**

Loyalty

### Responsibility

Customer Intelligence System Administrator

### Steps

A sub-index is composed of the weighted average of several measures. For each sub-index you can specify the weight for each measure. For each measure, buckets can be created by specifying value ranges and scale points. Click **Update** to save your changes.

Loyalty Setup			
Operating Unit Vision Operations			
Measure Weights			
Measure	Description	Weight	
<u>Cumulative Order</u> <u>Quantity</u>	Total Quantity Ordered so far	10	
Cumulative number of contracts	Cumulative number of contracts until last day of p		
Cumulative number of interactions	Cumulative number of interactions until last day of		
Number of orders	Number of orders created during the period	10	
Number of products bought	Total number of distinct products ordered until the	10	
Number of referals	Number of referals	10	
On time payment rate	On-time payment rate during this period		
Order Amount	Total amount of orders created during this period	10	
<u>Order quantity</u>	Total qty of items in orders created during this pe	10	
Order recency	Period between last order date and last date of p	10	
Years of association	Years of association	10	
ontime payments	On time payments for payments due during this p		
total payments	Total payments due during this period		

### Figure 2–5 Loyalty Setup:Measure Weights screen

Update ) ( Apply Buckets to All Operating Units )

### 2.4.6 Enable / Disable Measures

This page provides links for Satisfaction, Loyalty or Others. For each of the three Measures, the checkbox serves as a "toggle" to let you either disable or enable any given sub-measure.

### **HTML Navigation**

Measure

### Responsibility

Customer Intelligence System Administrator

### Steps

Select the measure that you want to enable or disable.

The checkbox serves as a "toggle" to enable to disable the measure. If the checkbox is selected, the measure is disabled. Click **Update** to save your changes.

#### Figure 2–6 Measure Indexes Configuration:Satisfaction Measures page

Measure Indexes Configuration

Satisfaction Measures

Measure	Disabled
Billing	
Contract	
Product Quality	
Product Shipment	
Service	

Update

# 2.5 Running a Concurrent Program

After setting up the profile options and the setup data, the concurrent program "Extract Customer Summary" should be run before using the reports. To ensure that the users have up-to-date information for their reports, this program should be run periodically afterwards.

### Prerequisites

You will need a self service application login to run a concurrent program.

### **Forms Navigation**

Requests > Run

### Responsibility

Customer Intelligence Collection Manager

### Steps

Run the concurrent program "Extract Customer Summary".

# 2.6 Troubleshooting

The following information may assist you in dealing with issues that arise after implementation of Oracle Customer Intelligence.

- Obsolete Concurrent Program "Extract Transaction Summary": This concurrent program is obsolete due to performance reasons. It is now extracted as part of the concurrent program "Extract Customer Summary".
- Error "ORA-1403, No data found": When performing a customer search, you receive this error, make sure the set up steps have been followed.
- CGI Errors-Error Report Engine Terminate Abnormally or Error Server Not Responding: There may be an issue with the reports server. Contact your DBA for assistance.
- If the report is not generated in a reasonable amount of time, check the database for invalid objects and re-compile them.
- Transaction Summary in Customer Overview Report: A limited number of transactions, which you have set in the profile BIC: Number of records in customer reports, will appear unless you click the Run Report button.

**Note:** For troubleshooting any report, set the user profile BIC: Debug to Yes. After you have completed the debug process, remember to set the profile back to No.

- If "Extract Calendar" does not appear on the list of concurrent request programs, please do the following:
  - a. Switch to System Administrator responsibility.
  - b. Open the Request Groups form.
  - c. Query for "BIC programs".
  - d. Add "Extract Calendar" as a program within this request group.
  - e. Save your changes.
- If BIC set up (JTF login) opens with the error "Unable to locate home page for this user":
  - a. Switch to System Administrator responsibility.
  - **b.** Open the Menu Definition form.

- **c.** Query for "BIC\_ROOT\_MENU".
- **d.** Prompt for "BIC\_ADMIN\_TAB\_MENU" will be blank. Enter a value here. For example, "BIC Admin Tab".
- e. Save your changes.
- f. After the concurrent request runs successfully, bounce the Apache server and login again.