Siebel Brightware™

Analytics Overview Guide

Version 8.1.6

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Chapter

1

About this Manual

About Oracle’s Siebel Brightware Analytics

Analytics provides a way to process and look at information stored in the transactional database. Analytics extracts information about customer requests, Agents, and queues residing in your Siebel Brightware database and transfers that information to the Datamart database for fast and easy data analysis.

Analytics can benefit your organization regardless of its size, whether it’s a large enterprise with several installations of Siebel Brightware and numerous Agents who interact with thousands of customers daily or a small company with only one Siebel Brightware installation and a few Agents. The information gathered from your daily operations can improve your operation by ultimately reducing costs and increasing revenues, while increasing customer satisfaction.

Analytics provides:

- An extraction, transformation, and loading tool (the ETL Utility) that transfers data from the Siebel Brightware transactional database to the Datamart database and a user interface (the DB Administrator) for scheduling, monitoring, and managing the ETL Utility. These are collectively referred to as *ETL Tools*.
- A Datamart that stores the information that the ETL Utility extracted and transformed using the *star schema* data model. The information in the Datamart can be used to analyze Agent activity, customer requests, queue activity, and other data from your Siebel Brightware installation.
- A set of templates for report generation which use Crystal Decisions Crystal Reports. Reports created from these templates enable business analysts at your site to examine data and detect informational relationships and trends.

Figure 1-1 shows the flow of information from the Siebel Brightware transactional database server through the ETL Tools to the Datamart.

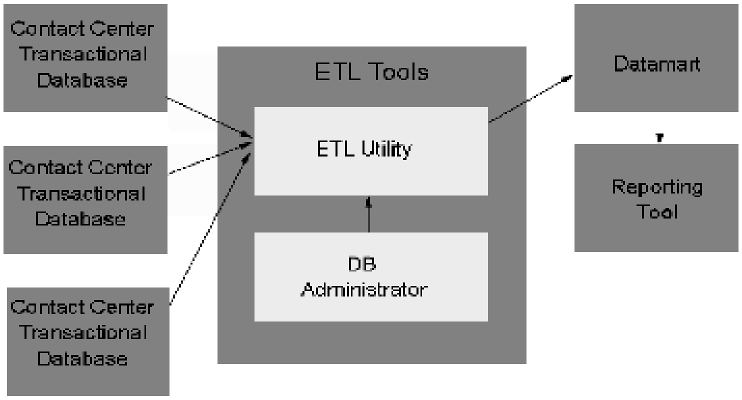

Contact Center
Transactional
Database
Contact Center
Transactional
Database
Contact Center
Transactional
Database
ETL Tools
ETL Utility
DB
Administrator
Datamart
Reporting
Tool

Figure 1-1. Information Flow

Audience

If you are involved in installing or using Analytics, read this manual. It contains information about the components and a summary of all the available report templates. We assume the reader is familiar with Windows or Solaris, and has database experience.

Organization

This guide contains the following chapters:

- Chapter 2, “Report Templates”, on page 7 provides instructions for installing the Analytic Report Templates and running the sample reports.
- Appendix A, “Troubleshooting”, on page 29 contains information about the error log and performance issues.

Related Documentation

For more information about Analytics please refer to these documents included in PDF format on the CD:

- *DB Administrator Guide*
- *Report Developer Guide*

Conventions

The following typographic conventions are used in this document:

- Items that you are instructed to click or select, such as button names and hyperlinks, are bold:
    - Select **Add Response**.
    - Click the **OK** button.
- Documents, headings, and chapter titles are italicized:
    - "Refer to the *Reference Manual* for more information."
- Notes are flagged along the left margin:

This icon indicates noteworthy information.

- Cautions are flagged along the left margin:

This icon indicates critical information.

- Programming code and system messages appear in a fixed-width font:

```
Set-request-condition (<condition>)
```

- Hyperlinks and Cross References - If viewing a document online, you can navigate through it using hyperlinks, which appear in blue text, and cross references. Although not displayed in blue, the Table of Contents and Index entries are also hyperlinks. Cross references are specific page number references. Click the page number to navigate to that page:
    - Refer to "If You Need Help", on page 3.
- The term Type usually refers to typing information on your keyboard:
    - Type the number of decimal places you want displayed.
- The term Enter typically refers to the "Enter" key on your keyboard:
    - Type the number of decimal places you want displayed and press the **Enter** key.
- When a directory path is given, the hard drive letter is omitted since it is unknown what hard drive the system is installed on. Only the default install path is supported:
    - Documents are available under edocs\Siebel Brightware\docs\.

If You Need Help

Technical Support is available to customers who have an active maintenance and support contract with Oracle. Technical Support engineers can help you install, configure, and maintain your Oracle application.

This guide contains general troubleshooting guidelines intended to empower you to resolve problems on your own. If you are still unable to identify and correct an issue, contact Technical Support for assistance.

Information to Provide

Before contacting Oracle’s Siebel Technical Support, try resolving the problem yourself using the information provided in this guide. If you cannot resolve the issue on your own, be sure to gather the following information and have it handy when you contact technical support. This enables your Oracle support engineer to more quickly assess your problem and get you back up and running more quickly.

Please be prepared to provide Technical Support the following information:

Contact information

- Your name and role in your organization.
- Your company's name
- Your phone number and best times to call you
- Your e-mail address

Product and platform

- In which Oracle product did the problem occur?
- What version of the product do you have?
- What is your operating system version? RDBMS? Other platform information?

Specific details about your problem

- Did your system crash or hang?
- What system activity was taking place when the problem occurred?
- Did the system generate a screen error message? If so, please send us that message. (Type the error text or press the Print Screen button and paste the screen into your email.)
- How did the system respond to the error?
- What steps have you taken to attempt to resolve the problem?
- What other information would we need to have (supporting data files, steps we'd need to take) to replicate the problem or error?

Problem severity

- Clearly communicate the impact of the case (Severity I, II, III, IV) as well as the Priority (Urgent, High, Medium, Low, No Rush).
- Specify whether the problem occurred in a production or test environment.

Contacting Oracle’s Siebel Technical Support

You can contact Technical Support online, by email, or by telephone.

Worldwide Support Center

Telephone: 800-214-0400 or 650-341-0700

Oracle's Siebel SupportWeb

https://ebusiness.siebel.com/supportweb/

Email Support

mailto: siebelsupport@oracle.com

Chapter

2

Report Templates

Introduction

Analytics enables you to analyze data gathered from your Siebel Brightware environment. You can use any analysis or reporting tool to create custom reports and analytic templates.

Crystal Decisions Crystal Reports is recommended as the Analytics reporting tool. You can use the provided templates written in Crystal Reports as they are or modify them to meet your needs. The templates require Crystal Reports to be installed on a reporting server. This can be the same server as your Datamart server. The Web Reporting component of Crystal Enterprise also needs to be installed and configured if you want to view reports on the Web.

This chapter provides instructions for:

- Installing the Analytic Templates.
- Running the Analytic Templates.
- Viewing the Analytic Templates on the Web.
- Connecting to the Datamart.

Refer to Appendix A, “Troubleshooting”, on page 29 if you have installation problems.

Installing the Analytic Templates

The following procedure provides instructions for installing the Analytic Templates.

To install the templates:

1. Install and configure Crystal Reports and the Crystal Enterprise as described in their respective documents.
2. Create an ODBC DSN that points to the Datamart database on the reporting server. See “Connecting to the Datamart”, on page 8 for more information.
3. Use the Oracle’s Siebel Brightware installer to install the reports on your reporting server. They will be installed in the \Analytics\Reports directory under the main installation directory.

Now you are ready to use the templates provided with Analytics or create new ones.

Running the Analytic Report Templates

After you install the templates, as described in “Installing the Analytic Templates”, on page 7, you can begin using them.

The templates are categorized and arranged in several directories. You can use the HTML pages in the reports directory to browse through the available reports.

To run a report template:

1. Open the file in Crystal Reports either from the Crystal Reports File menu or by clicking the report file object.
2. Click the **Refresh** icon and enter the appropriate input parameters when prompted.

   Crystal Reports prepares the report based on the parameters you entered and displays it.

Connecting to the Datamart

Crystal Reports uses ODBC connections to access data in the source databases for reports.

To run the templates, or any new templates you create, you must create a **System DSN** that points to the Datamart.

The Analytic Templates provided with this application assume there is a DSN named `BWDatamart` which points to the Datamart database. The installation script creates a user named `dmuser` in that database with the default password of `sanrafael`. The `dmuser` user should be used for accessing the Datamart database for reporting and analysis purposes.

To use different names for the DSN, you must reconfigure the templates. The following procedure provides instructions.

To reconfigure the templates:

1. Open the report template in Crystal Reports.
2. Select **Set Location** from the Database menu.
3. Follow the instructions to choose the new DSN and the database name.
4. Run the report after changing the location to new values.
5. Save the report file.

Be sure that the connection is configured using the TCP/IP protocol.

Viewing the Analytic Templates on the Web

Crystal Enterprise provides components that enable you to view your reports using Web connections. To do this, you must install the Crystal Enterprise and have a Web server running on the reporting server. Crystal Enterprise supports Microsoft Internet Information Server (MS-IIS) and Netscape Web Server. See the Crystal Decisions documentation for more information.

The easiest way to access templates over the Web is to create a virtual directory on your Web server that points to the Analytic templates directory. Make sure you set the virtual directory's permission properties correctly (including read, directory browsing, execute permissions, and so on). Also, verify that the application for the virtual directory is set to default. See the Crystal Enterprise documentation for more information.

After you create the virtual directory, you can access the reports by directing your browser to the URL and clicking the file names to run reports. For example, if you named your virtual directory `FPreports`, the URL is: `http://<your report server name>/FPreports`.

About Web Channel Reports

This section lists the Analytic templates for Web included in the Analytics product, together with a brief description of each template. These templates are reports written in Crystal Reports, which can be used to address the reporting needs of organizations using Analytics. They can also serve as examples and starting points for custom reports.

The templates are organized into several categories and templates for each category are stored in a separate directory. The templates are listed below by category.

Categories

- **Knowledgebase Optimization Reports**
- **Marketing Insight Reports**
- **Operational Reports**
- **Site Content Optimization Reports**

Knowledgebase Optimization Reports

Additional Input Statistics

This report shows usage frequency of responses which utilized additional input during the specified period. Also included is the average actual feedback score for those uses. The entries are listed in descending order of feedback score. The feedback scores utilized in the report are the actual feedback scores specified by the customer.

Intent Matching Statistics

This report shows intent matching statistics for requests in the specified period. The total number of requests in the period having the specified number of intent matches are listed. The entries are listed in order of increasing frequency.

Intent Usage Details

This report shows all requests for which a given intent was used during the specified period. The requests are listed in ascending date order. For each request, the initial input fields are listed. The name of the field and the value entered by the user are shown. Also, an indicator is included which indicates whether the field was subjected to NLP analysis. An intent is considered to be used when a situation, for which the intent is considered the best corresponding intent, is used. Remember that, although most situations have a single corresponding intent, some situations have no corresponding intent at all.

Requests with Specified Number of Intent Matches

This report shows all requests started in the specified period having the specified number of matching intents. The requests are listed in ascending date order. For each request, the initial input fields which were analyzed by the NLP engine are also listed (by name and the value entered by the customer). Following each request is a hot-link that, when clicked, produces a sub-report of the actual intents that matched the specific request. Click the “Matched Intents” link to see a list of intents which matched the particular request.

Responses with Specified Feedback

This report shows all responses that occurred in the specified period with a specified actual feedback score. The responses are listed in ascending date order. For each response, the intent that matches the corresponding situation is listed. Also listed are all actions taken as part of that response. The actual feedback score is the score actually specified by the customer. Remember that a given situation may be used multiple times, each one of which is a response. And, while most situations have a matching intent, some do not (i.e., default situations.). The actions are described in the following manner:

- **Class** – Indicates the general classification of the response.
- **Type** – Indicates the specific type of response.
- **Desc** – Describes the action in more detail.

Click on the “Intent” name to see a list of the initial input fields for all requests which led to usage of the intent during the specified period.

Marketing Insight Reports

Conversation Details

This report describes a specified conversation in detail. The number, start, and end of the conversation is listed. The customer involved in the conversation, if known, is identified. A list of all requests which are part of the conversation is included (in ascending request date order). The details about each particular request include:

- Its number.
- Its start time.
- Its process and think durations.
- The source page from which the request was submitted.

Intent Usage Statistics

This report shows the average actual feedback scores for intents used in the specified period. All intents used in that period whose average score falls within the specified range are listed. An intent is considered to be used when a situation, for which the intent is considered the best corresponding intent, is used. Remember that, although most situations have a single corresponding intent, some situations have no corresponding intent at all. The feedback scores utilized in the report are the actual feedback scores specified by the customer. The actual scores are averaged across each intent usage. (Remember that a single situation, to which the intent matches, can have many responses each of which can be scored by the customer.) The number of requests indicates the total number of requests for which the indicated intent was used in the specified period. Click on the “Intent Name” to see a list of all requests which resulted in the use of the intent during the specified period.

Request Details

This report describes a specified request in detail. The number, start, and end of the conversation, of which the request is a part, is listed. The customer involved in the conversation, if known, is identified. The details about the particular request follow and include:

- The Knowledge Bases utilized in the analysis of the request.
- The initial input fields submitted by the customer.
- The intents that matched the request during the analysis.

Finally, a list of the situations for the request is included along with all responses (and their actions) for each situation. The intent is the one that matched the situation (if there was one). The actual feedback score of each response is included (if there was one).

Operational Reports

Daily Activity Statistics

This report shows the daily conversation activity during the specified period. The statistics for each day are shown and the days are listed in ascending order followed by grand totals for the period. The statistics include:

- Number of conversations started on that day.
- Number of requests involved in the conversations of that day.
- Average number of requests per conversation of that day.

Note that a given conversation may span multiple days. For such conversations, all of its requests are considered to have occurred on the day in which the conversation started.

Feedback Statistics

This report shows feedback statistics for a specified period trended across that period. The average feedback scores are reported in groups from worst to best and the number of requests whose score was in that range are reported. The feedback scores utilized in the report are the actual feedback scores specified by the customer. The actual scores are averaged across each request (remember that a single request can have many responses each of which can be scored by the customer).

Requests Which Were Escalated

This report shows all escalations that occurred in the specified period sorted by channel of escalation. The intent used for the response is listed, in ascending intent name order, along with the analyzed initial input for the request for which the response was generated.

Escalations By Channel Type Trend

This report shows the trend of escalations to live agents in response to web requests, during the specified period.

Site Content Optimization Reports

Intent Usage By Source

This report shows intent usage for each source page from which requests were processed during the specified period. The total number of requests processed from each source page are included and the report is generated in descending order of request frequency. Each intent used from the source page’s requests are listed along with the frequency of the usage of that intent. The intents are listed in descending order of usage frequency. An intent is considered to be used when a situation, for which the intent is considered the best corresponding intent, is used. Remember that, although most situations have a single corresponding intent, some situations have no corresponding intent at all.

Intent Usage Frequency

This report shows intent usage for a specified period trended across that period. All intents used during that period are listed. An intent is considered to be used when a situation, for which the intent is considered the best corresponding intent, is used. Remember that, although most situations have a single corresponding intent, some situations have no corresponding intent at all.

Requests Which Were Abandoned

This report shows the requests which were abandoned in the specified period. Requests are included in the report if they were started in the specified period and were then abandoned (meaning that no action was ever taken for the request). The number of each request is listed along with all of the analyzed initial input fields for the request.

About Email Reports

This section lists the Analytic Templates for email, included in the Analytics product, together with a brief description of each template. These templates are reports written in Crystal Reports, which can be used to address the reporting needs of organizations using Analytics. They can also serve as examples and starting points for custom reports.

The templates are organized into several categories and templates for each category are stored in a separate directory. The templates are listed below by category.

Category

- **Agent Reports**
- **Business Unit Summary Reports**
- **Classification Reports**
- **Domain Volume Reports**
- **Knowledge Base Reports**
- **Message Detail Reports**
- **Message Summary Trend Reports**
- **Queue Reports**
- **Request Viewer Reports**
- **Request Volume Reports**
- **Response Time Reports**
- **Service Level Agreement Reports**
- **Thread Reports**

Agent Reports

Agent Activities

This report shows online and available times of an agent in the specified date range.

- **Online Time** – The amount of time that the Agent was logged in to the Agent Desktop during the time period. This is the total amount of time between logon and exit (or logoff.) It includes any time that the Agent was Unavailable but the Desktop was still open.
- **Available Time** – The amount of time that the Agent was logged in to the Agent Desktop during the time period less any time that the Agent was Unavailable.

Closes By Agent and Reason

This report lists closed requests (and timing metrics on them) by agent and by reason for closing per agent.

Closes By Reason and Agent

This report lists closed requests (and timing metrics on them) by reason for closing and by agent per reason.

Closes By All Agents

This report is charting the number of closed requests by business unit for each agent.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model. The line through the bars is the average number of closes by all agents and business units. This report compares agents to each other and to the average in terms of closed requests.

Closes By Real Agents

This report is charting the number of closed requests by agent not including the Intelligence Engine and Supervisor. The line through the bars is the average number of closes by all the agents shown. The report compares agents to each other and to the average in terms of closed requests.

Closed Requests By Agent

This report shows the number of closed requests, in the specified date range, by agent.

Closed Requests – The number of requests closed during the time period by the Agent. These may include requests received earlier and pended for later completion and so may reflect a higher number than the Agent actually was sent.

Agent-Handling Times By Agent

This report shows average, minimum, and maximum agent handling times for requests closed in the specified date range by agent. The handling times are aggregated across individual handling events irrespective of requests. For example, if an agent handles a single request twice, each of those handling events will be aggregated as opposed to the sum of the handling times for those two events.

Note that handling time by supervisors is not included in this report.

Average (Maximum, Minimum) Handling Time – The average (maximum, minimum) amount time that the closed messages counted in the previous column were open on the Agent desktop. This does not include pended time.

Opens Pends and Closes By Agent

This report shows all request events (i.e., changes of state) that occurred in the specified date range and the agent associated with that event.

Note that this is not the number of unique requests that were actually processed. Nor is it the number of queue events associated with such requests (it does not reflect reassignments.)

Pended Requests By Agent

This report shows the number of request pends and average pending times by agent in the specified date range.

- **Pended Requests** – The number of times that an Agent pended a request in the report time period. If the same message was pended multiple times, it will be counted once for each pended period.
- **Average Pending Time** – The average amount of time that the Agent had messages in pended status.

Reassigned Requests By Agent

This report shows number of requests reassigned by agents in specified date range.

Reassigned Requests – Includes messages that the Supervisor may have reassigned while the Agent had them in Pended or Working status. In the Supervisor-reassigned case, the reassignment is counted for the Agent that had the message just prior to the reassignment.

Transfers By Agent

This report shows all agents that transferred requests during the specified date range and the number of transfers effected by each of those agents. Supervisors are not included in this report.

Agent-initiated Requests By Agent

This report shows the number of agent initiated request listed by agent, during the specified period. Agents names appear in the form of “lastname, firstname.” Supervisors are reported together as “SUPERVISOR.”

Business Unit Summary Reports

Business Units

This report lists all Business Units, including the Exception unit, which are defined in the Datamart.

The “Unassigned” business unit is utilized for all data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Agent-Handling Times by Business Unit

This report shows minimum, average, and maximum agent handling times for requests closed in the specified date range by business unit. The handling times are aggregated across individual handling events irrespective of requests. For example, if multiple agents handle a single request, each of those handling events will be aggregated as opposed to the sum of the handling times for those events.

Note that handling time by the Intelligence Engine and supervisors is not included in this report.

- **Closed Requests** – The number of requests closed during the time period for the business unit. These may include requests received earlier and pended for later completion and so may reflect a higher number than the business unit actually was sent.
- **Average (Maximum, Minimum) Handling Time** – The average (maximum, minimum) amount of time that the closed messages were open on the Agent desktop. This does not include pended time.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Exception Unit Flow

This report shows the flow of requests through the Exception unit, by Contact Center source, in the specified date range. Only those Contact Center sources whose names match the specified criteria are included in the report.

Note that the number of Opened and Closed requests do not necessarily match. This is because there may have been requests in the Exception unit at the start or end of the specified date range.

- **Opened** – The number of requests received in the Exception unit in the specified date range.
- **Closed** – The number of requests processed out of the Exception unit in the specified date range.

Replies By Security and Business Unit

This report shows the number of manual replies, by type of security, sent from each business unit during the specified period. The “unassigned” business unit, if present, encompasses data from old Contact Center databases where Datamart records have yet to be upgraded to the new business unit model.

Classification Reports

Classifications

This report shows a breakdown of message classifications, by business unit, used for closed requests in the specified date range.

Note that a message can be classified in more than one way. The report also displays the total number of unclassified requests. The average, minimum and maximum response times for requests closed under each classification are also shown.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Classifications By Agent

This report lists the number of closed requests and response time metrics by Classification per agent in the specified date range. Note that a message can be classified in more than one way and counted under each Classification name separately.

Domain Volume Reports

Domains By Customer Volume

This report ranks the Top 10 domains by the number of customers from each domain. The report is beneficial to determine the number of customers from each email domain.

Domains By Request Volume

This report ranks the Top 10 domains by number of requests received, for a given period of time, and reports the number of requests received from that domain for each business unit.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

The report is beneficial to determine the request volume from each email domain. It also prints the total number of requests for a specified time period.

Knowledge Base Reports

Suggested Actions Summary

This report measures the performance of the automated answer agent in its effectiveness in providing valuable suggestions to Agents. The counts are the number of closed messages.

Suggested Actions By Agent

This report measures the performance of the automated answer agent in its effectiveness in providing valuable suggestions to Agents. The counts are the number of closed messages.

- **None Suggested** – No responses were suggested by the automated Answer agent.
- **Suggested & None Accepted** – One or more responses were suggested but none were accepted by agent.
- **Suggested & Accepted Without Edit** – One or more of the suggested responses were accepted by agent without manual changes.
- **Suggested & Accepted With Edit** – One or more of the suggested responses were edited by agent.
- **Suggested, Accepted & Unknown Edited** – One or more of the suggested responses were accepted by agent but whether the suggestions were edited is unknown.

Suggested Actions By Queue

This report measures the performance of the automated Answer agent in its effectiveness in providing valuable suggestions to Agents. The counts are the number of closed messages.

Suggested Actions Details

This report lists all the actions (responses) that have been suggested by the automated Answer agent.

- Order of suggestion rate (number of times it was suggested).
- Acceptance rate by agents (the number of times suggested actions were accepted).
- Correctness rate (number of times accepted suggestions were edited before use).

Note that counts are not the number of messages, since the Answer agent may suggest multiple responses for the same message.

Suggested Actions Details By Agent

This report lists the Top 5 suggested actions for closed messages to agents by the automated Answer agent and measures.

- Suggestion rate (the number of times action suggested to agent).
- Acceptance rate (the number of times agent accepted the suggested action in order to construct a response).
- Correction rate (the number of times agent corrected the accepted action while using it to construct a response).

Top Customers By Top Intents

This report lists the Top 10 most frequent Intents found (questions asked) in messages sent by the Top 5 most frequent customers.

Customers are identified simply by the domain of their email address.

The counts are not the number of messages but the number of times the intent was found, because a message may contain multiple intents.

Top Intents By Top Customer

This report lists the Top 5 most frequent Intents found (questions asked) in messages sent by the Top 10 most frequent customers.

Customers are identified simply by the domain of their email address.

The counts are not the number of messages but the number of times the intent was found, because a message may contain multiple intents.

Intents and Actions

This report lists the Intents found (questions asked) in messages and lists them in decreasing order of frequency and for each intent, the minimum amount of time it took to close messages with the intent, the average amount of time and the maximum. Then for each Intent, it lists the actions that were suggested (suggested response) by the automated answer agent, the number of times and their frequency it was suggested along with the number of times the action was accepted by agents and finally, the number of times the accepted answer was corrected in order to compose a response.

The counts are not the number of messages closed since a message may find more than one intent.

Top Intents By Date

This report lists the Top 5 most frequent Intents found (questions asked) in messages, grouped by DATE. The minimum, average and maximum response times are how long an agent took to close messages with the specified intent.

The counts are not the number of messages since a message may contain multiple intents.

The DATE is the closing date of the message.

Top Intents By Week

This report lists the Top 5 most frequent Intents found (questions asked) in messages, grouped by WEEK. Each intent is broken down by the business unit in which the intent was utilized.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model. The minimum, average and maximum response times are how long an agent took to close messages with the specified intent.

The counts are not the number of messages since a message may contain multiple intents.

The Week Of is the week within which the message was closed.

Top Intents By Month

This report lists the Top 5 most frequent Intents found (questions asked) in messages, grouped by MONTH. The minimum, average and maximum response times are how long an agent took to close messages with the specified intent.

The counts are not the number of messages since a message may contain multiple intents.

The Month is the month within which the message was closed.

Message Detail Reports

Message Assignment to Agents By Queue

This report provides an overview of requests received and processed for the specified reporting period, grouped by business unit and queue name.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Note that this report does not include processing that was incurred in the Review queue (as well as the inbound and outbound queues).

Only requests that were processed manually are included. Requests that were processed automatically are not included in this report.

Message Details By Customer

This report contains a list of all requests that either entered a Queue or were closed from a Queue, either by an agent or a Supervisor, during the report time period. The requests are grouped by Customer Name. If a request was reassigned from one queue to another, both assignments will appear in the report.

- **Time Received** – This is the time when the request initially entered the system.
- **Queue Name** – The name of the Queue to which the request was assigned during the report time period. If the request was reassigned to another queue before closing, the request status will be “assigned to queue” and an additional entry will be found in the report for the queue from which the request was closed.
- **Request Status** – The status of the request at the end of the time period. Possible values include: Closed or Queue Name request was reassigned to.
- **Response Time** – This is provided for closed messages only and is the elapsed time between when the request entered the system and when a response was sent or the request was closed without a response. This number includes handling/pended time for all agents (including the Intelligence Engine) who handled the message.
- **Subject** – The subject of the original request.

Message Details By Queue

This report shows details about requests that are received in the specified date range, grouped by queue name. Receiving, closing and response times, as well as request status, are shown. If a request flows through more than one queue, its status under each queue is shown separately. The Queue names are displayed in the form of “BusinessUnit: QueueName”.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model. Only requests that were processed manually are included. Requests that were processed automatically are not included in this report.

Message Summary Trend Reports

Message Responded Automatically - Weekly

This report shows all messages that were received and responded to by the Intelligence Engine in specified date range weekly breakdown by Business Unit.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Message Responded by Agents - Weekly

This report shows all messages that were received and responded to by human agents in specified date range with weekly breakdown by Business Unit.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Requests Received Trend

This report shows the trend of all requests that were received in the specified period with periodic breakdown by Business Unit.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Queue Reports

System-Handling Times By Queue

This report shows the average, maximum, and minimum system-handling times during the specified date range, by queue within business units.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

- **Assignments** – The number of assignments (to any agent for any request) made in the queue during the specified date range.
- **AVG (MAX, MIN) Handling Time** – The average (maximum, minimum) amount of time that requests waited to be received on an agent’s desktop after they were received in the queue.

Queue Detail

This report includes all messages assigned to the Queue within the report time period whether they have been closed during that time period or not. Multiple reassignments to the same queue for the same request are counted and displayed individually. The message may have been assigned to the Queue by the Intelligence Engine, a human Agent or a Supervisor. The Queue names are displayed in the form of “BusinessUnit: QueueName”. The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

- **Received in Queue** – The time that the message was received in the Queue following message processing and initial assignment by the Intelligence Engine.
- **Status** – The status of the request at the end of the time period. Possible values include: Closed, Queue (for reassigned messages).
- **Response Time** – This is provided for closed messages only and is the elapsed time between when the request entered the system and when a response was sent or the request was closed.
- **Customer** – The email address of the person who sent the request.
- **Subject** – The subject of the original request.

Requests Closed By Queue

This report provides summary statistics for each Queue about the messages that were closed from the Queue during the specified date range.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

- **Business Unit** – The name of the Business Unit in which the queue is defined.
- **Requests Closed** – The number of messages that were assigned to the Queue and were closed by an Agent working on that Queue.
- **AVG Response Time** – This average is for closed messages only and is the average amount of time between when a message entered the system and when a response was sent or the request was closed without a response.
- **MAX Response Time** – The longest single response time for a message assigned to the Queue and closed during the report time period.
- **SLA** – This is the Service Level agreement for each queue. It is the maximum amount of time a request assigned to the queue should remain in the system before being closed.

Requests Reassigned By Queue

This report shows the count of requests that are reassigned from a Queue to other ones, during the specified date range.

Business Unit – The name of the Business Unit in which the queue is defined.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Requests Received By Queue

This report shows the number of requests assigned to the Queue within the report time period. If the same request is reassigned to the Queue multiple times, each assignment will be counted separately.

Business Unit – The name of the Business Unit in which the queue is defined.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Request Viewer Reports

Original Message Info

This report shows details about the original message associated with a specified request number.

Reply Message Info

This report shows details about the reply messages associated with a specified request number.

Request Volume Reports

Monthly Request Volume From Top 5 Domains

This report lists the number of requests from the Top 5 domains by volume for each month, for any given period of time.

The requests for each domain are further broken down by the business unit in which the requests were processed.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model. The report is beneficial to determine the monthly request volume from each email domain.

Requests By Day of Week

This report lists the number of requests received on each day of the week, for a given period of time. The report is beneficial to determine the request volume for each day of the week.

Requests By Half Hour of Day

This report lists the number of requests received in each half hour of the day, for a given period of time. The report is beneficial to determine the request volume at various times of the day.

Weekly Request Volume From Top 5 Domains

This report lists the number of requests from the Top 5 domains for each week, in the given period of time. The report is beneficial to determine the request volume from each email domain.

Response Time Reports

Response Time Distribution

This report shows response time distribution for closed requests in a specified date range in one hour increments. All requests with response times more than 24 hours are grouped together. Only those requests that were processed manually are reported. Requests that were answered automatically are not included in this report.

Service Level Agreement Reports

Closes Meeting SLA

This report provides summary statistics for all request closed within SLA limits in the specified date range. This includes requests closed by an Agent or a Supervisor. Results are grouped by Queue.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

- **Business Unit** – The name of the Business Unit in which the queue is defined.
- **Number Met SLA** – This is the number of closed requests whose response time was less than or equal to the Service Level Agreement for the Queue.
- **AVG Response Time** – This is the average amount of time between when a message entered the system and when a response was sent or the request was closed without a response.
- **MAX Response Time** – The longest single response time for a message closed from that Queue during the report time period.

Queue Detail Exceeding SLA

This report lists all requests closed during the report time period whose response time was greater than the Service Level Agreement for the Queue from which they were closed.

- **Received In Queue** – The time that the message was received in the Queue following message processing and initial assignment by the Intelligence Engine.
- **Business Unit** – The name of the Business Unit in which the request was processed.

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

- **Queue Name** – The name of the Queue from which the request was closed.
- **Response Time** – This is the elapsed time between when the request entered the system and when a response was sent or the request was closed without a response. This number includes handling/pended time for all agents (including the Intelligence Engine) who handled the message.
- **Queue SLA** – This is the Service Level agreement for the queue. It is the maximum amount of time a request assigned to this queue should remain in the system before being closed.

SLA Level Chart

This report displays the number of requests closed within each of Normal, Warning, Critical, and Exceeding SLA levels, for the queue they were closed from, in the specified date range.

SLA Levels By Queue

This report shows how many requests were answered within normal level, how many within warning level, how many in critical level and how many in excess of SLA value of the queue they were closed from. All the requests are grouped by Queue (within business unit).

The “Unassigned” business unit, if present, encompasses data from old Contact Center databases whose Datamart records have yet to be upgraded to the new business unit model.

Thread Reports

Customers Generating Threads

The report lists the customers generating the top 10 highest thread sizes in the specified time period. The related Tracking ID’s are also displayed. The report enables the user to identify the customers sending inquiries resulting in a particular thread size.

Thread Size Distribution

This report is the graphic representation of the number of threads in the system for a specified time period, grouped by thread size.

About Multi-Channel Reports

This section lists the templates for Multi-Channel reports that combine email and Web channels, together with a brief description of each template. These templates are written in Crystal Reports, which can be used to address the reporting needs of organizations using Analytics. They can also serve as examples and starting points for custom reports.

Request

Multi-request Conversation Trend

This report shows the trend of conversations, in which the customer submitted multiple requests, which ended during the specified period.

Request By Channel Trend

This report shows the trend of requests, by the channel through which they were received, that were received during the specified period. Note that Web requests which resulted in escalation to email or chat cause the creation of additional requests, and therefore are reported multiple times.

Requests By Language

This report shows the number of all requests, by language, which were received in the specified period. Note, the language is that which the system determined for the request, if done at all, and may not actually reflect the language in which the request was written. If the language is not determined, it is reported as “unknown.”

Editing Report Parameter Field Defaults

Several reports require the user to select parameters for the report such as a queue name. Use Crystal Reports to add or edit parameter default values for the reports.

In Crystal Reports, click the **Insert** menu and then select **Field Object**. Crystal Reports displays the Field Explorer dialog box

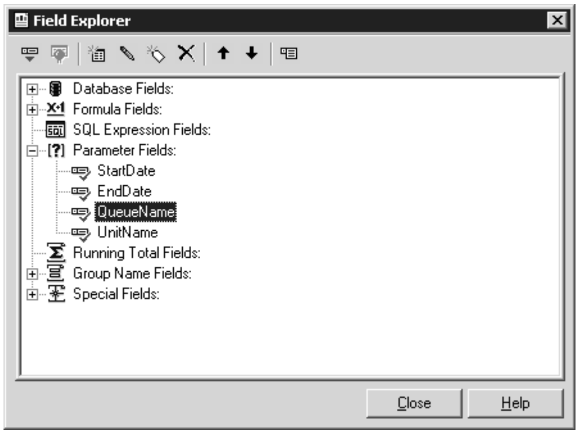
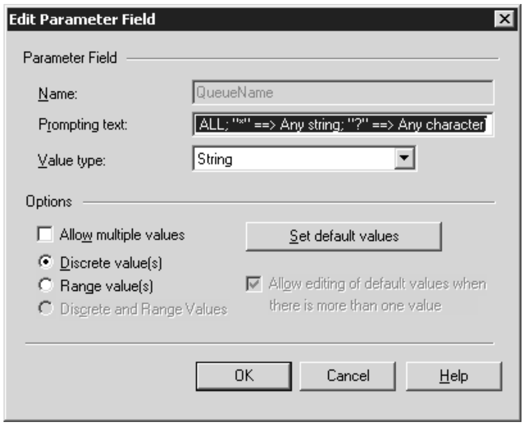

Field Explorer
Database Fields:
Formula Fields:
SQL Expression Fields:
Parameter Fields:
StartDate
EndDate
QueueName
UnitName
Running Total Fields:
Group Name Fields:
Special Fields:
Close
Help

Figure 2-1. Field Explorer Dialog Box

Select **Parameter Fields**. Existing parameter fields are displayed.

Right click a parameter field and select **Edit** to change the default data. Crystal Reports displays the Edit Parameter Field dialog box.


Edit Parameter Field
Parameter Field
Options
Set default values
OK
Cancel
Help

Name: QueueName

Prompting text: ALL; "*" ==> Any string; "?" ==> Any character

Value type: String

☐ Allow multiple values

● Discrete value(s)

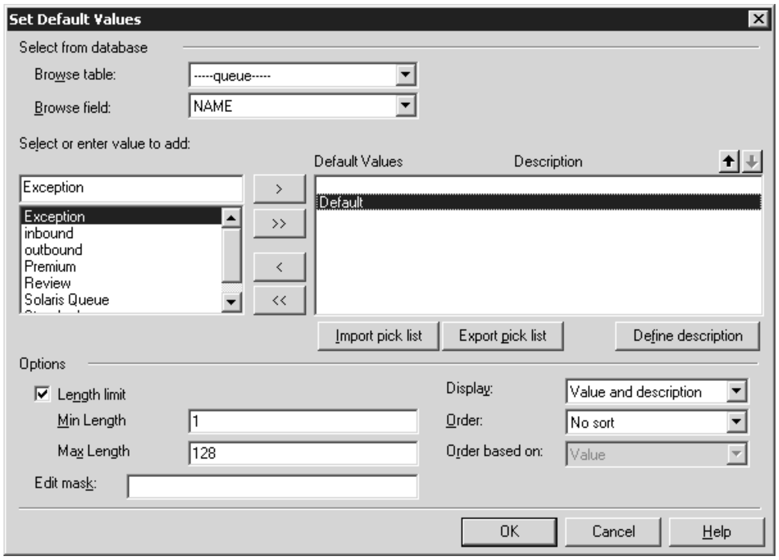
○ Range value(s)

○ Discrete and Range Values

☑ Allow editing of default values when there is more than one value

Figure 2-2. Edit Parameter Field Dialog Box.

Click the **Set Default Values** button. Crystal Reports displays the Set Default Values dialog box.


Set Default Values
Select from database
Select or enter value to add:
Default Values
Description
>
>>
<
<<
Import pick list
Export pick list
Define description
Options
OK
Cancel
Help

Browse table: -----queue-----

Browse field: NAME

Exception

- Exception
- inbound
- outbound
- Premium
- Review
- Solaris Queue

Default

☑ Length limit

Min Length: 1

Max Length: 128

Edit mask:

Display: Value and description

Order: No sort

Order based on: Value

Figure 2-3. Set Default Values Dialog Box

If needed, select a table name from the **Browse table** drop down list. Select a field from the **Browse field** drop down list.

Select or type values in the left pane.

Use the select buttons to move the desired values to the right pane to indicate they are default values.

Click **OK** or **Close** for each of the dialog boxes. Be sure to save the report template.

Chapter

A

Troubleshooting

Introduction

This appendix contains information to help you resolve some common problems you may encounter. The sections that follow describe messages contained in the error log and known Oracle performance issues.

Logs

There are several files that log events relating to program activities.

- **analyticsError.txt** – Used for both Windows and Unix installation lists, errors that occur when Analytics is running.
- **taskscheduler.log** – Used for Windows installations only, the NT Service log that lists the schedule the ETL ran.
- **taskschedulerError.log** – Used for Windows installations only, lists errors that occurred when the Scheduler ran.
- **various log files for Solaris systems** – You can find them in the /var/edocs/Siebel Brightware directory

The ETL error log file, `analyticsError.txt`, is located in the directory where Analytics is installed. It is generated automatically when an ETL event first encounters an error and appended if additional errors occur.

Figure A-1 provides an example of the error log.

```
------------------------------------------------------
Tue Nov 21 10:46:06 PST 2000
com.edocs.datamart.eis.etl.Main: Error

com.edocs.datamart.eis.etl.common.ETLException: source con-
nection failed --
  driver=edocs.weblogic.jdbc.mssqlserver4.Driver
  url=jdbc:weblogic:mssqlserver4:FPTrackin@ccserver:1433
  user=edocs
  message='Could not locate entry in sysdatabases for database
'FPTrackin'. No entry found with that name. Make sure that the
name is entered correctly.

       at com.edocs.datamart.eis.etl.common.ETLConnectionOb-
ject.<init>(com/edocs/datamart/eis/etl/common/ETLConnection-
```

Figure A-1. Sample Error Log file

In the figure, the following error message appears:

```
Could not locate entry in sysdatabases for database 'FPTrackin'.
No entry found with that name. Make sure that the name is entered
correctly.
```

To correct the error, verify the parameters for this source (database name, server name, and so on). In this case, the correct database name is `FPTracking`, not `FPTrackin`.

Oracle Issues

The following items relate to Oracle Datamarts only:

- As the size of your Datamart increases, report generation may become slow. To increase processing speed, enter the following command from SQL Plus at the SQL prompt:

  execute dbms_utility.analyze_schema ('dbadmin', 'COMPUTE');
- If an ETL event is in progress and it is interrupted either intentionally or due to a failure, you must wait at least five minutes before restarting the interrupted process. If you are unable to restart the interrupted process, contact your database administrator.

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