

# Oracle Knowledge Analytics User Guide

Working with Oracle Knowledge Analytics Reports

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Oracle, Inc.

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**PREFACE** 

# About this Guide

This guide is for business analysts and general business users who need to understand how Oracle Knowledge applications are performing. It describes the basic features of the reporting user interface and provides detailed explanations of the packaged Intelligent Search and Information Manager reports.

This preface includes information on:

- "In This Guide" The general organization of this guide
- "Screen and Text Representations"
- "References to World Wide Web Resources"

## In This Guide

The Oracle Knowledge Analytics User Guide is divided into the following sections:

Chapter 1, "Oracle
<b>Knowledge Analytics</b>
Overview"

This chapter describes the client library installation for Information Manager and Intelligent Search, as well as the Client-side installation.

Chapter 2, "Using Oracle Knowledge Analytics"

This chapter describes the underlying architecture of the Oracle Knowledge client library API including how the remote interface works, the ITO structure and, the error handling strategy .

Chapter 3, "Information Manager Analytics Reports"

This chapter provides an overview of how to integrate the client library into various client side technologies like java apps, jsp apps, .Net apps. and explains the performance implications of various designs.

Chapter 4, "Information Manager Operational Reports"

This chapter describes the services that are exposed from Information Manager and provides sample code.

Chapter 5, "Intelligent Search Analytics Reports"

This chapter describes the services and methods exposed from Intelligent Search and provides sample code.

Chapter 6, "Report Description Details"

This appendix provides a list of error code constants used by the client library. The Oracle Knowledge client library API uses the error code constants to create localized error messages for each type of error that can be thrown.

# Screen and Text Representations

The product screens, screen text, and file contents depicted in the documentation are examples. We attempt to convey the product's appearance and functionality as accurately as possible; however, the actual product contents and displays may differ from the published examples.



# References to World Wide Web Resources

For your convenience, we refer to Uniform Resource Locators (URLs) for resources published on the World Wide Web when appropriate. We attempt to provide accurate information; however, these resources are controlled by their respective owners and are therefore subject to change at any time.



CHAPTER 1

# Oracle Knowledge Analytics Overview

Oracle Knowledge Analytics is an enterprise-grade business intelligence application designed specifically to provide insight into the effectiveness and performance of Oracle Knowledge applications. The Oracle Knowledge Analytics solution features extensive dashboards, intuitive reporting, and ad hoc investigation tools that enable you to:

- assess answer quality, and whether users are finding the information they seek
- guard against escalations by identifying and filling knowledge gaps and determine whether important information is missing from your content
- understand user behavior, monitor customer satisfaction, and continually improve user experience
- keep pace with new product releases and evolving audience needs

## The Analytics Application

An Oracle Knowledge Analytics application consists of multiple components configured to extract, store, and present data collected from one or more configured Intelligent Search and/or Information Manager instances. Analytics components include:

- the ETL server, which uses a configured Oracle Knowledge instance to execute the data extraction, transform, and load (ETL) processes
- the data warehouse, which stores the extracted Intelligent Search and Information Manager log data, repository data and additional metadata used to create the report
- a configured Oracle Business Intelligence Enterprise Edition (OBIEE) instance, which provides the user interface for generating, viewing, and working with reports

### **OBIEE and Oracle Knowledge Analytics**

Oracle Knowledge Analytics uses a configured instance of OBIEE installed on the Reports server. OBIEE is available separately, and is not included in the Oracle Knowledge product distribution. This document describes how to configure an installed instance of OBIEE to use the RPD (repository) and Catalog components that are provided with the product. See http://www.oracle.com/technetwork/middleware/bi-enterprise-edition/overview/index.html for more information on OBIEE.



**CHAPTER 2** 

# Using Oracle Knowledge Analytics

The Oracle Knowledge Analytics user interface is a web-based application that is installed and configured for your organization. You access the application by entering the application URL in a web browser, and logging on using the credentials provided by your application administrator.

# Logging onto Oracle Knowledge Analytics

The default format of the Oracle Knowledge Analytics URL is:

http://<hostname>:7001/analytics

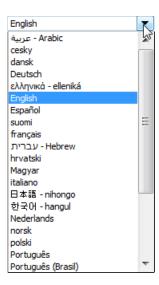
where <hostname> designates the domain and/or server that hosts the application.

To log onto Analytics, enter the URL for your organization's application in the browser address field.

The Oracle Business Intelligence Sign In dialog prompts you to enter your User ID and Password:



Note: You can change the language of the user interface using the dropdown menu on the Sign In page:



The Oracle Knowledge Home tab displays.

# The Oracle Knowledge Home Page

The Oracle Knowledge application builds and updates the **Home** tab based on your activity. When you first log in, you may see a minimum amount of information in the **Recent** and **Most Popular** sections:



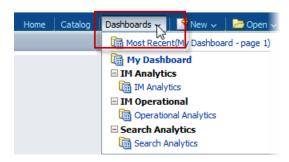
After you have used the application, the most recent and most frequently used dashboards and reports will be displayed in these sections of the **Home** tab:



You can use the links to Recent and Most Popular dashboards and reports to quickly navigate to high-level and detail reports of interest.

# The Oracle Knowledge Dashboards

The Oracle Knowledge reports are organized under separate dashboards, which are available in the Dashboards dropdown menu:





# The IM Analytics Dashboard

The **IM Analytics** dashboard contains reports on Information Manager content usage and performance. The dashboard displays the reports as a set of tabs, and opens the **Most Popular Content** report by default:



The IM Analytics reports include:

- Most Popular Content
- Workflow Productivity
- · Case Link Usage
- Published Content
- Content Usage

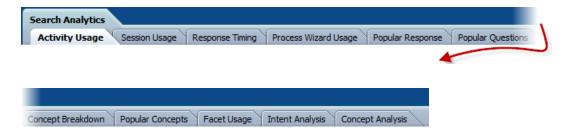
## The IM Operational Dashboard

The IM Operational dashboard reports on how Information Manager content is being managed throughout the publishing lifecycle. The dashboard displays the reports as a set of tabs, and opens the Content in Process report by default:

## The Search Analytics Dashboard

The **Search Analytics** dashboard contains reports that provide information about user behavior, such as questions, click-thrus, and process wizard use, the application's responses, such as concept matching, and system performance, such as response time.

The dashboard displays the reports as a set of tabs, and opens the Activity Usage Report report by default:



The IM Analytics reports include:

- Activity Usage
- Session Usage
- · Process Wizard Usage
- Popular Response
- Popular Questions



8 SPECIFYING REPORT CRITERIA

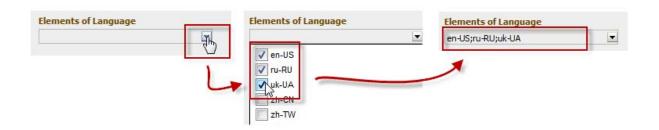
- · Concept Breakdown
- Popular Concepts
- Facet Usage
- Intent Analysis
- · Concept Analysis

# Specifying Report Criteria

Oracle Knowledge Analytics reports enable you to view data that you are specifically interested in by specifying report criteria. Each Analytics report provides prompts, which are drop-down menus of various criteria that are relevant to the report:



You use the prompts by selecting one or more items from the various dropdowns to define the overall time range, the months within the specified range, and any other elements of interest to tailor the report data:



9 Working with Reports

The selection criteria within each of the prompts are described in the descriptions of the individual reports.

# Working with Reports

The OBIEE user interface provides a full range of functionality for working with reports, including printing to html and PDF formats, and exporting to many commonly-used business formats, including PDF, Excel, and PowerPoint, as well as comma-separated value (CSV) format. See http://www.oracle.com/technetwork/middleware/bi-enterprise-edition/overview/index.html for more information on working with reports in the OBIEE user interface.



**CHAPTER 3** 

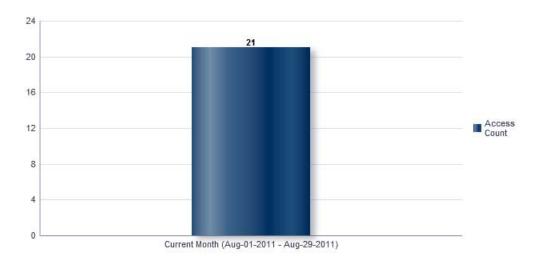
# Information Manager Analytics Reports

The Information Manager Analytics reports include:

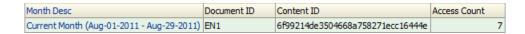
- Most Popular Content
- Workflow Productivity
- · Case Link Usage
- Published Content
- Content Usage

# The Most Popular Content Report

The **Most Popular Content Report** displays information about the content channels that are most frequently accessed by end-users.



Month Desc	Document ID	Access Count
Current Month (Aug-01-2011 - Aug-29-2011)	EN1	7
Current Month (Aug-01-2011 - Aug-29-2011)	EN2	6
Current Month (Aug-01-2011 - Aug-29-2011)	網絡2	5
Current Month (Aug-01-2011 - Aug-29-2011)	TE2	2
Current Month (Aug-01-2011 - Aug-29-2011)	AL2	1



For each reporting period, the report displays:

**Document ID** The unique document identifier.

Access Count The number of times the document was accessed.

You can set the start and end dates for the report to display data from multiple months in a single report, or select a specific month for which to display data.

You can filter the report using the following prompts:

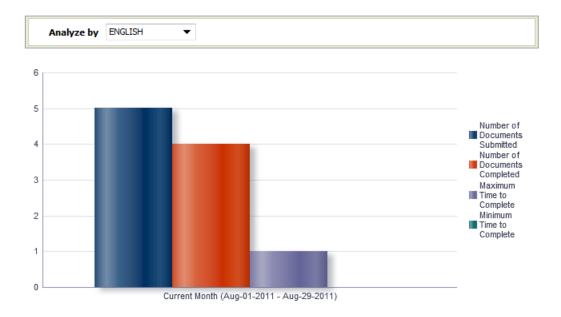
RepositoryThe repositories defined for your Information Manager application.ViewThe views defined for your Information Manager application.User GroupThe user groups defined for your Information Manager applicationChannelThe content channels defined for your Information Manager application.LocaleThe locales (languages) defined for your Information Manager application.Content TypeWhether the document is the master document or a translated version of the master

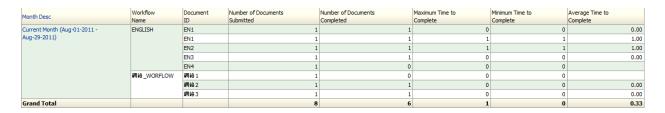
document.

Category Level 1-n The list of high-level (1-6) content categories defined in the repository.

# The Workflow Productivity Report

The **Workflow Productivity Report** shows the amount of time required for documents to progress through defined workflow processes.



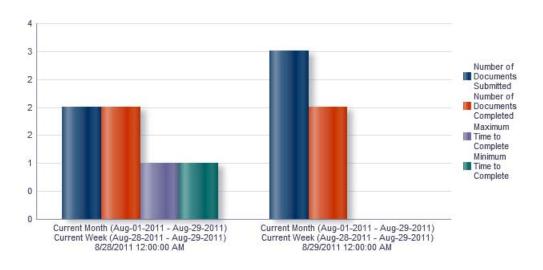


The report chart displays data only for the first workflow in the report table. You can display graph data for another workflow by selecting it from the Analyze by dropdown at the top of the report display:



You can select the month to drill down to weekly data for the selected workflow, and select the week to drill down to daily data:





For each workflow that was invoked during the reporting period, the report displays:

Document IDThe unique document identifier.Number of Documents SubmittedThe number of documents submitted to the workflow process.Number of Documents CompletedThe number of documents completed in the workflow process.Maximum Time to CompleteThe maximum time, in days, for a document to complete the workflow process.Minimum Time to CompleteThe minimum time, in days, for a document to complete the workflow process.Average Time to CompleteThe average time, in days, for a document to complete the workflow process.



13 THE CASE LINK USAGE REPORT

You can set the start and end dates for the report to display data from multiple months in a single report, or select a specific month for which to display data, and additionally filter the report using the following prompts:

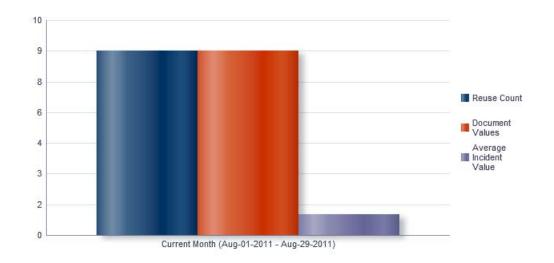
**Repository** The repositories defined for your Information Manager application.

View The views defined for your Information Manager application.

Category Level 1-n The list of high-level (1-6) content categories defined in the repository.

# The Case Link Usage Report

The **Case Link Usage Report** helps you to analyze case linking, which is a primary indicator of content reuse as a measurement of knowledge centered support (KCS). Documents that are linked to multiple support cases are of higher value than documents that are not linked to any cases. When agents link cases to support documents, they can specify an incident value, which is a numeric value that represents the severity of the issue combined with the value of the customer to the organization. For example, a support case from the largest customer about a well-known problem would have a higher incident value than a similar case from a much smaller customer.



Month Desc	More Details	Reuse Count	Document Values	Average Incident Value	
Current Month (Aug-01-2011 - Aug-29-2011)	More Details	9	9		1

For each time period, the report displays:

**Reuse Count** The number of documents linked to cases for the period.

**Document Values** The sum of incident priority values for the period.

Average Incident Value The average of the incident values, which are numeric values that agents assign to

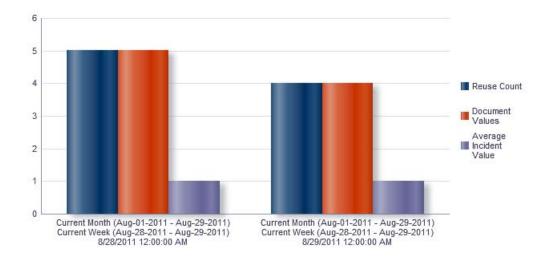
cases to represent the severity of the issue combined with the value of the customer to

the organization.

14 THE CASE LINK USAGE REPORT

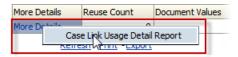
You can select the month to drill down to weekly data for the selected workflow, and select the week to drill down to daily data:





Month Desc	Week Desc	Day ID	More Details	Reuse Count	Document Values	Average Incident Value
Current Month (Aug-01-2011 - Aug-29-2011)	Current Week (Aug-28-2011 - Aug-29-2011)	8/28/2011 12:00:00 AM	More Details	5	5	1
		8/29/2011 12:00:00 AM	More Details	4	4	1

You can set the start and end dates for the report, and select the **More Details** link to display the **Case Link Usage Detail Report**.



# The Case Link Usage Detail Report

The **Case Link Usage Detail Report** displays details about the documents linked to cases and the incident values associated with them:

#### Case Link Usage Detail Report

Document ID	Day ID	Case Number	Incident Value	
EN1	8/28/2011 12:00:00 AM	EN1_case1		1
		EN1_case2		1
TE1	8/28/2011 12:00:00 AM	case structure one		1
		case structure two		1
TE2	8/28/2011 12:00:00 AM	case structure three		1
網絡1	8/29/2011 12:00:00 AM	網絡1_case1		1
		網絡1_case2		1
網絡2	8/29/2011 12:00:00 AM	網絡2_case1		1
		網絡2_case2		1

The Case Link Usage Detail Report displays the following for each document:

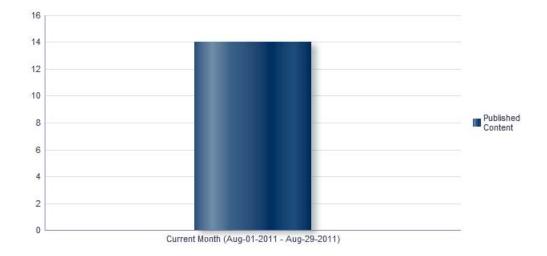
**Case Number** The cases that the document is linked to.

**Incident Value** The agent-assigned issue-severity/customer-value number for this case.

# The Published Content Report

The **Published Content Report** displays information about the number of content records published in each content channel. The report is divided into sections that display the number of documents published, the average days required to publish content, and the total time to publish content for each repository channel.

## **Published Content**



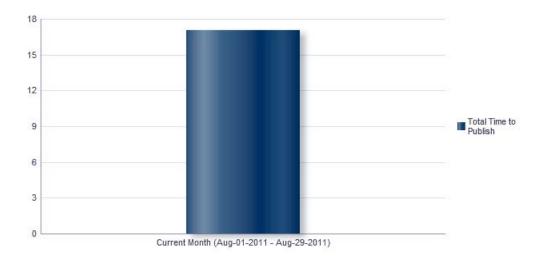
Time Month Desc	Channel Referencekey	More Details	Published Content
Current Month (Aug-01-2011 - Aug-29-2011)	ALL	More Details	2
	ENGLISH	More Details	6
	ONEMANY	More Details	1
	TEST	More Details	3
	網絡	More Details	2

# Average Days to Publish



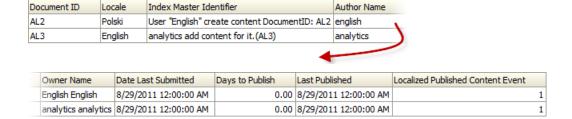
Time Month Desc	Channel Referencekey	More Details	Avg Days to Publish
Current Month (Aug-01-2011 - Aug-29-2011)	ALL	More Details	0.00
	ENGLISH	More Details	0.00
	ONEMANY	More Details	0.00
	TEST	More Details	0.00
	網絡	More Details	0.00

#### **Total Times to Publish**



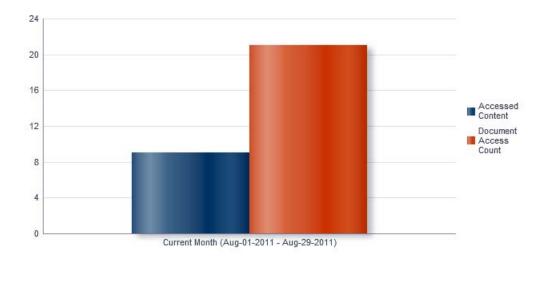
Time Month Desc	Channel Referencekey	More Details	Total Time to Publish	
Current Month (Aug-01-2011 - Aug-29-2011)	ALL	More Details		2
	ENGLISH	More Details		9
	ONEMANY	More Details		1
	TEST	More Details		3
	網絡	More Details		2

You can drill down from any section by time or Channel, and you can select **More Details** to display details on documents for a selected Channel:



# The Content Usage Report

The **Content Usage Report** helps you identify content that is current and still in use. Content tends to be viewed less frequently and become less valuable over time. This report helps show the trend of content access over its life span.



Month	More Details	Accessed Content	Document Access Count
Current Month (Aug-01-2011 - Aug-29-2011)	More Details	9	21

Refresh -Print -Export

The report displays the following for each time period:

**Document Access Count** The number of times the content items were accessed by users.

You can set the start and end dates for the report to display data from any time period in a single report, and select the individual months for which you want to display data.

You can filter the report using the following prompts:

**Repository** The repositories defined for your Information Manager application.

**View** The views defined for your Information Manager application.

Category Level 1-nThe list of high-level (1-6) content categories defined in the repository.ChannelThe content channels defined for your Information Manager application.

**Locale** The languages defined for your Information Manager application.

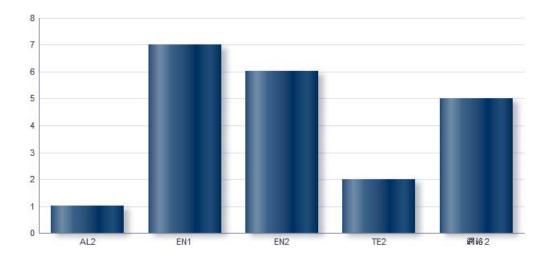
You can select the **More Detail** link to view the access details for individual documents in the **Accessed Content Details Report**:



# The Accessed Content Details Report

The Accessed Content Details Report shows access details for individual documents.





Content	Locale	Original Author	Owner	Date Last	Content Age Since Original Published	Latest Major
Content	Locale	Name	Name	Accessed	IN Days	Version
AL2	Polski	english	English English	8/29/2011 12:00:00 AM	69	1,0
EN1	Deutsch	english	English English	8/29/2011 12:00:00 AM	69	2,0
EN1	English	analytics	analytics analytics	8/29/2011 12:00:00 AM	69	2,0
EN1	English		analytics analytics			
EN2	Deutsch	deutsch	Deutsch Deutsch	8/29/2011 12:00:00 AM	69	1,0
EN2	Українська	english	English English	8/29/2011 12:00:00	69	2.0
EN2	Українська		English English	AM		
EN2	中文	analytics	analytics analytics	8/29/2011 12:00:00 AM	69	1.0
TE2	中国	tina wei	tina wei	8/29/2011 12:00:00 AM	70	1,0
網絡2	English	网络	网络网络	8/29/2011 12:00:00 AM	69	1,(
網絡2	中文	網絡	網絡 網絡	8/29/2011 12:00:00 AM	69	1.0

Content Age Since Last Modified	Indexer Master Identifier	Access
IN Days		Count
69	User "English" create content DocumentID: AL2	1
69	User "English" translate "EN1" on version 1.0 to de_DE:	1
69	User "analytics" create content EN1	
	User "analytics" create content EN1 User "English" edit "EN1" by modifying its attribute	:
69	User "Deutsch" create content EN2	:
69	User "English" translate "EN2" on version 1.0 to uk_UA:	1
	User "English" translate "EN2" on version 1.0 to uk_UA: User "English" edit "EN2(UK)" by modifying the attribute:	-
69	User "analytics" translate "EN2" on version 1.0 to zh_TW:	2
70	TE2_中国:解释面向对象基本理论,从继承到设计方案	2
69	User "网络" translate "網絡2" on version 1.0 to en_US:	:
69	User "網絡" create content	4
	69 69 69 69 69 69 69 69 69 69 69	Indexer Master Identifier  69 User "English" create content DocumentID: AL2  69 User "English" translate "EN1" on version 1.0 to de_DE:  69 User "analytics" create content EN1  User "analytics" create content EN1 User "English" edit "EN1" by modifying its attribute  69 User "Deutsch" create content EN2  69 User "English" translate "EN2" on version 1.0 to uk_UA:  User "English" translate "EN2" on version 1.0 to uk_UA: User "English" edit "EN2(UK)" by modifying the attribute:  69 User "analytics" translate "EN2" on version 1.0 to zh_TW:  70 TE2_中国: 解释面向对象基本理论,从继承到设计方案  69 User "网络" translate "網絡2" on version 1.0 to en_US:

#### For each document, the report displays:

**Locale** The language that the document uses.

Original Author Name The id of the user who created the document.

Owner Name The id of the user who controls the document.

**Date Last Accessed**The date that the document was last accessed by an application end user.

Content Age Since Original Published

The number of days since the document was initially published.

**Latest Major Version** The most recent major version number.

Content Age Since Last Modified

The number of days since the document was last modified.

Indexer Master Identifier The master ide

The master identifier for the document.

**Access Count** The number of times the document was accessed by end-users.

You can drill down further to view access details for a single document:

Content	Content ID	Locale	Original Author Name	Owner Name	Date Last Accessed	Content Age Since Original Published IN Days	Latest Major Version	Content Age Since Last Modified IN Days	Indexer Master Identifier	Access Count
调验2	c63148f00c9a4e78ab0ac4d3271b1009	English	网络	网络网络	8/29/2011 12:00:00 AM	69	1.0	69	User "网络" translate "網絡2" on version 1.0 to en_US:	1
网络2	c63148f00c9a4e78ab0ac4d3271b1009	中文	en is	MIG MIG	8/29/2011 12:00:00 AM	69	1.0	69	User "網絡" create content	4



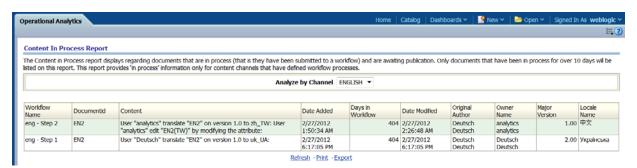
**CHAPTER 4** 

# Information Manager Operational Reports

The Information Manager Operational report provides information on content in process.

# The Content in Process Report

The **Content in Process** report displays documents that have been submitted to a workflow within information manager and are not yet published. This report provides 'in process' information only for content channels that have defined workflow processes, and includes only documents that have been in process for more than 10 days.



You can view documents for only one channel at a time. You can select the channel using the **Analyze by Channel** drop-down menu:



The report displays the following information for each document in process:

**Workflow Name** The workflow in which the document is currently held.

Document ID The ID of the document.

Content The Index Master Identifier.

**Date Added**The date that the document was placed in the workflow.

**Days in Workflow** The number of days that the document has been held in the workflow.

**Date Modified** The date of the most recent update, which corresponds with the date that the

document progressed to its current workflow step.

Original Author The name of the document's author.

Owner Name The name of the document's current owner.

Major Version The current major version of the document.

**Locale Name** The locale for the document.

CHAPTER 5

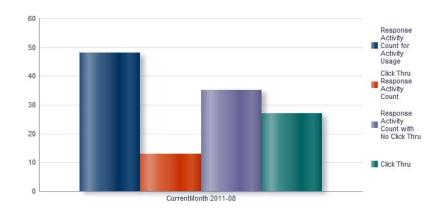
# Intelligent Search Analytics Reports

The Intelligent Search Analytics reports include:

- Activity Usage
- Session Usage
- · Response Timing
- Process Wizard Usage
- Popular Response
- Popular Questions
- · Concept Breakdown
- Popular Concepts
- Facet Usage
- Intent Analysis
- · Concept Analysis

# The Activity Usage Report

The **Activity Usage Report** shows the number of user activities and the corresponding click-thru rate by month. User activities include searching, paging through results, escalating for additional information and deflecting or completing escalations, invoking and using process wizards, click-thrus to answers, and rating results and submitting user feedback.



Month	More Details	Response Activity Count for Activity Usage	Click Thru Response Activity Count	Response Activity Count with No Click Thru	Click Thru
CurrentMonth 2011-08	More Details	48	13	3.	27.08%

The report displays the following categories of information:

Response Activity Count The total number of response activities for the time period.

Click-thru Response Activity Count

The number of activities in which at least one click-thru action occurred.

No Click-thru Response

The number of activities in which no click-thru actions occurred.

Activity Count Click-thru Rate

The percentage of activities in which at least one click-thru action occurred.

You can set the start and end dates for the report, and select specific months within the specified dates for which to display data. The report displays data for the current month by default. You can filter the report using the following prompts:

**User** The user ids associated with the activities included in the report.

**Language** The language in which the activity was performed.

**Activity Type** See *Activity Types* for a complete list of the user activities included in Analytics reports.

**Product Concept** The products or concepts that users include in their questions.

**Intent** The intents that users included in their questions.

You can select **More Details** to drill down to details about the questions included in the total user activities in the Question Details Report.



# The Question Details Report

The **Question Details Report** displays the number of unique questions that users entered during the reporting period. Each row in the report represents a unique question, and the number of times it occurred.

#### **Question Details Report**

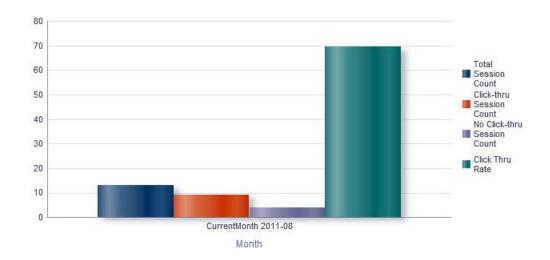
Question	Question Count
bird	2
fly	1
mark	1
software	2
web user post a question topic	1
небо	1
птица	1
Grand Total	25

Return -Refresh -Print -Export -Create Bookmark Link

24 THE SESSION USAGE REPORT

# The Session Usage Report

The **Session Usage Report** provides data on how users are interacting with the application. Click-thru activity within a session is a good indicator of both user engagement and content relevance. You can track the click thru trend over an extended time to gauge the effects of content improvements and other changes to the system on the overall user experience.



Month	More Details	Total Session Count	Click-thru Session Count	No Click-thru Session Count	Click Thru Rate
CurrentMonth 2011-08	More Details	13	9	4	69.23%

The report displays the following categories of information:

**Total Session Count** The total number of sessions for the time period.

Click-thru Session Count The number of sessions in which at least one click-thru action occurred.

No Click-thru Session Count The number of sessions in which no click-thru actions occurred.

Click-thru Rate The percentage of sessions in which at least one click-thru action occurred.

You can set the start and end dates for the report to display data from multiple months in a single report, or select a specific month for which to display data.

You can filter the report using the following prompts:

**User Segment** One or more defined subgroups of application users. User segments can be user groups defined in

Information Manager or defined in the Search business rules.

**User** The user ids associated with the sessions.

**Language** The language in which the session activity occurred.

Query Source The source, such as Web, from which the search action originated. InfoCenter defines several

query sources such as content list or search results. Your application may also use custom query sources to provide a better understanding of how users interact with your knowledge base.

**Cluster** The question clusters occurring within the sessions reported on.

**Intent** The intents occurring within the sessions reported on.

25 THE QUESTION DETAIL REPORT

You can select **More Details** to drill down to session activity details for the selected time period in the **Question Details Report**:



# The Question Detail Report

The **Question Detail Report** displays the number of unique questions that users entered during the reporting period. Each row in the report represents a unique question, and the number of time it occurred.

Question Details Report



Return - Refresh - Print - Export - Create Bookmark Link

You can select an individual question to list the sessions in which it occurred, and the number of occurrences within each session, for example:

Select a question from the list:



26 THE RESPONSE TIMING REPORT

The Question Details Report displays the session and count details for the selected question:

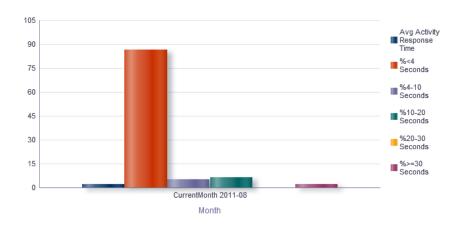
#### **Question Details Report**

Question	Session Id	Question Count△▼
software	1.00	1
software	13.00	1
<b>Grand Total</b>		2

Return - Refresh - Print - Export - Create Bookmark Link

# The Response Timing Report

The **Response Timing Report** helps you determine whether Intelligent Search runtimes are responding fast enough to user requests, especially when used to compare performance trends over time. Various types of activities occur in the scope of a typical user session, including asking a question, clicking thru on an answer, paging through results, etc. Typical causes of performance degradation include overloaded search runtimes or business rules that require additional time to process.



Month	More Details	Avg Activity Response Time	%<4 Seconds	%4-10 Seconds	%10-20 Seconds	%20-30 Seconds	%>=30 Seconds
CurrentMonth 2011-08	More Details	2.40	86.17%	5.32%	6.38%	0.00%	2.13%

The report divides the response time data into the following:

Avg. Activity Response Time The average system response time for all activities during the reporting period.

27 THE QUESTION DETAILS REPORT

%<4 Seconds
% 4-10 Seconds
%10-20 Seconds
%20-30 Seconds
%>=30 Seconds

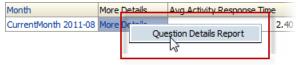
The percentage of activities for which the average response time was within the listed ranges.

You can set the start and end dates for the report, and select specific months within the reporting period for which to display data. You can drill down to view details on selected days.

You can filter the report using the following prompts:

User Segment	One or more defined subgroups of application users. User segments can be user groups defined in Information Manager or defined in the Search business rules.
Language	The language in which the session activity occurred.
Query Source	The source, such as Web, from which the search action originated. Info- Center defines several query sources such as content list or search results. Your application may also use custom query sources to provide a better understanding of how users interact with your knowledge base.
Activity Type	See Activity Types for a complete list of the user activities included in Analytics reports.
Cluster	The question clusters occurring within the sessions reported on.
Concept	The products or concepts that users include in their questions.

You can select **More Details** to drill down to details about the questions included in the total user activities in the **Question Details Report**.



# The Question Details Report

The **Question Detail Report** displays the number of unique questions that users entered during the reporting period. Each row in the report represents a unique question, and the number of times it occurred.



#### **Question Details Report**



Return - Refresh - Print - Export - Create Bookmark Link

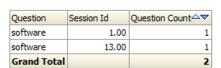
You can select an individual question to list the sessions in which it occurred, and the number of occurrences within each session, for example:

Select a question from the list:



The Question Details Report displays the session and count details for the selected question:

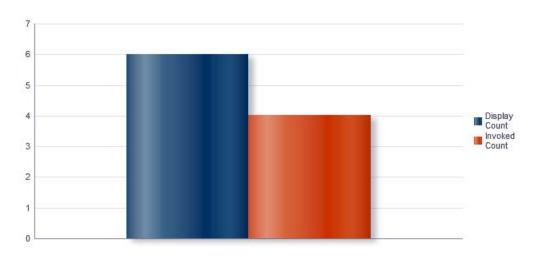
#### **Question Details Report**



Return - Refresh - Print - Export - Create Bookmark Link

# The Process Wizard Usage Report

The **Process Wizard Usage Report** shows how customers are using process wizards by listing which processes were most frequently displayed as results, and which were also subsequently selected by users.



Response	Display Count	Invoked Count
[Managed Answer/Process Wizard] Sample_Wizard	4	2
[Managed Answer/Process Wizard] UK	1	1
[Managed Answer/Process Wizard] zhongwen	1	1

The report data are sorted by process wizard name, and the report shows the following information for each process wizard:

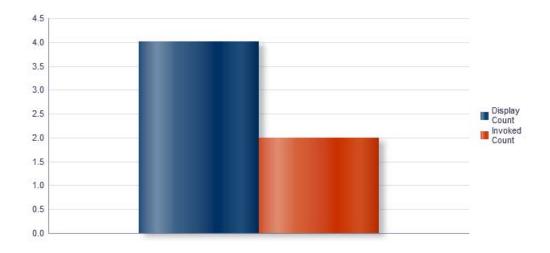
**Display Count**The number of times the process wizard was displayed as a result. **Invoked Count**The number of times users selected this wizard from the results.

You can set the start and end dates for the report, and display details for a selected process wizard:



When you select a process wizard from the high-level report, the **Process Wizard Usage Report** lists the activities in which the selected wizard was displayed and invoked, and the number of times that display and invocation occurred within each activity in the list:





Response	Activity Id	Display Count	Invoked Count
[Managed Answer/Process Wizard] Sample_Wizard	12.00	1	0
	13.00	1	1
	17.00	1	0
	22.00	1	1

# The Popular Response Report

The **Popular Response Report** shows which search results users are viewing most frequently. This report helps you to determine which content in your application is most frequently accessed. The responses in this report typically result from user search activity rather than browsing through around the site.

	More	Activity	Response Displayed	Click Thru
Response	Details	Count	Count	Rate
[Managed Answer/Rule] qa_rule6	More Details	46	46	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Chinese-T/HTML/UTF-8/HTML/UTF-8.htm	More Details	11	. 11	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Chinese-T/MS Word/Chinese_T.doc	More Details	10	10	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Chinese-T/RTF/Chinese_T.rtf	More Details	10	10	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Chinese-T/TXT/Big5/TXT/Big5.txt	More Details	10	10	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Chinese-T/TXT/UTF-8/TXT/UTF-8.txt	More Details	10	10	0.00%
[Managed Answer/Intent Response] Intent iResponse	More Details	9	9	33.33%
[Unstructured] http://www.ibm.com/ibm100/us/en/icons/	More Details	8	8	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Ukrainian/HTML/Windows-1251/Windows-1251-2.htm	More Details	4	4	0.00%
[Managed Answer/Intent Response] Intent2Response	More Details	4	4	0.00%
[Managed Answer/Process Wizard] Sample_Wizard	More Details	4	4	50.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/English/PDF/English1.pdf	More Details	3	3	0.00%
[Unstructured] http://gar546413:8226/search/index?page=content&id=TE2&actp=search&viewlocale=zh_CN	More Details	3	3	33.33%
[Unstructured] http://gar546413:8226/search/index?page=forums&topic=3cf5213736a64b0c981370b1e47998a9&message=e2214761d37d448db2acc3d22db8dd838 viewlocale=en_US#e2214761d37d448db2acc3d22db8dd83	More Details	3	3	0.00%
[Unstructured] http://qar546413:8226/search/index?page=forums&topic=ca7e083e68de4714afa998e49d3a52dd&message=28c24ebca537469180c7f54238c4e0b7& viewlocale=en_US#28c24ebca537469180c7f54238c4e0b7	More Details	3	3	33.33%
[Unstructured] http://www-01.ibm.com/software/rational/innovate/	More Details	3	3	0.00%
[Unstructured] http://www-03.ibm.com/financing/us/lifecycle/acquire/itsoftware.html?lnk=mhpr	More Details	3	3	0.00%
[Unstructured] http://www.ibm.com/smarterplanet/us/en/education_technology/lideas/index.html?re=CS1	More Details	3	3	0.00%
[Managed Answer/Intent Response] Intent3Response	More Details	3	3	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Chinese-S/HTML/GB-18030/HTML/GB18030.htm	More Details	2	. 2	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Chinese-S/HTML/UTF-8.html	More Details	2	. 2	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cedila/New_DataForMLD/Chinese-S/MS PowerPoint/Chinese_S.ppt	More Details	2	. 2	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New_DataForMLD/Chinese-S/RTF/Chinese_S3.rtf	More Details	2	. 2	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cedila/New_DataForMLD/Chinese-S/TXT/UTF-8/TXT/UTF-8.txt	More Details	2	2	0.00%
[Unstructured] file://localhost/home/gauser/apps/staging/cecilia/New DataForMLD/Documents acrossLangages/cjk-utf8.pdf	More Details	2	. 2	0.00%

The responses are sorted by **Activity Count** by default, and for each response, the report displays:



**Activity Count** The number of activities for this response.

Response Displayed Count

The number of times this response was displayed.

Click-thru Rate

The percentage of activities for which this response was clicked at

least once.

**Note:** If managed answers are configured and used in the Search runtime definition, the report will display either the intent response or business rule that was triggered in response to the user's search.

You can set the start and end dates for the report, and select specific months within the reporting period to display data for. You can filter the report using the following prompts:

One or more defined subgroups of application users. User segments can be user groups defined in Information Manager or defined in the Search

business rules.

**User** The user ids associated with the sessions.

**Language** The language in which the session activity occurred.

Questions corresponding to a specified system confidence level (low, medium, and high) indicating how well the responses should match the

user's request.

Activity Type

See Activity Types for a complete list of the user activities included in

Analytics reports.

Name of the portlet associated with a response. Possible values for this

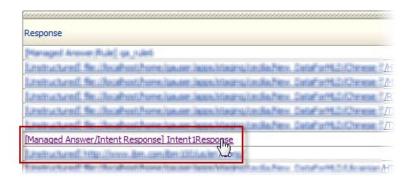
attribute include any answer purposes defined for the application, for

example, Answer, Promote,

You can select a response to drill down to view session activity details, or select **More Details** to drill down to individual questions and the number of times they occurred.

Select a response:

**Portlet** 

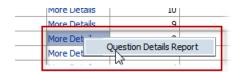


The report displays session activity details for the selected response:





#### Select More Details from either report view:



The **Question Details Report** displays the number of unique questions that users entered during the reporting period. Each row in the report represents a unique question, and the number of times it occurred.

#### Question Details Report

Question	Question Count
bird	2
fly	1
mark	1
software	2
web user post a question topic	1
небо	1
птица	1
Grand Total	25

# The Popular Questions Report

The **Popular Questions Report** shows a ranked list of normalized questions. This report provides insight into content gaps that may be preventing users from getting information that they seek, and cause them to escalate requests.

Time Month Desc	Normalized Question	Question Count	% Question Count	Click Thru
CurrentMonth 2011-08	bird	3	12.00%	100.00%
CurrentMonth 2011-08	software	2	8.00%	100.00%
CurrentMonth 2011-08	test	2	8.00%	0.00%
CurrentMonth 2011-08	Deutsche k?nnen nach Sch?tzungen der UNESCO nicht richtig	1	4.00%	0.00%
CurrentMonth 2011-08	Deutschland auf einen Blick	1	4.00%	100.00%
CurrentMonth 2011-08	fly	1	4.00%	0.00%
CurrentMonth 2011-08	glossary	1	4.00%	0.00%
CurrentMonth 2011-08	mark	1	4.00%	100.00%
CurrentMonth 2011-08	mobile	1	4.00%	100.00%
CurrentMonth 2011-08	real	1	4.00%	0.00%
CurrentMonth 2011-08	recordthepast aah	1	4.00%	0.00%
CurrentMonth 2011-08	structure	1	4.00%	0.00%
CurrentMonth 2011-08	topic	1	4.00%	100.00%
CurrentMonth 2011-08	web user post a question topic	1	4.00%	100.00%
CurrentMonth 2011-08	www aah	1	4.00%	0.00%
CurrentMonth 2011-08	аукціон	1	4.00%	0.00%
CurrentMonth 2011-08	небо	1	4.00%	0.00%
CurrentMonth 2011-08	сезон	1	4.00%	0.00%
CurrentMonth 2011-08	不文明表現	1	4.00%	0.00%
CurrentMonth 2011-08	中国	1	4.00%	100.00%
CurrentMonth 2011-08	解释面向对象基本理论,从继承到设计方案	1	4.00%	0.00%

The results are sorted by **Question Count** based on normalized question by default. For each normalized question, the report displays:

Question Count	The number of times that individual questions that are instances of the normalized question occurred.	
% Question Count	The percentage of the total questions in the report that the Question Count represents.	
Click Thru	The percentage of questions aggregated and at least one click-thru occurred.	

You can set the start and end dates for the report, and select specific months within the reporting period to display data for. You can filter the report using the following prompts:

User	The user ids associated with the questions.		
User Segment	One or more defined subgroups of application users. User segments can be user groups defined in Information Manager or defined in the Search business rules.		
Language	The language of the question.		
Matched Product Concept	The products or concepts included in the questions.		
Cluster	Defined groups of related questions.		

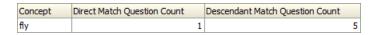


**Confidence Level** 

Questions corresponding to a specified system confidence level (low, medium, and high) indicating how well the responses should match the user's request.

# The Concept Breakdown Report

The **Concept Breakdown** report shows the distribution of user questions that match system concepts. It shows how well concepts match user questions.



For each normalized question, the report displays:

Direct Match Question Count

The number questions that contained the exact concept.

Descendant Match Question Count

The number questions that matched any child concepts (has a relation-

ships) of the concept.

You can set the start and end dates for the report to display data from multiple months in a single report, or select specific months for which to display data.

You can filter the report using the following prompts:

**User** The user ids associated with the questions.

One or more defined subgroups of application users. User segments can

**User Segment** be user groups defined in Information Manager or defined in the Search

business rules.

**Language** The language of the question.

The source, such as Web, from which the search action originated. Info-

Query Source

Center defines several query sources such as content list or search

results. Your application may also use custom query sources to provide a better understanding of how users interact with your knowledge base.

# The Popular Concepts Report

The **Popular Concepts Report** shows the most frequently matched concepts in users' questions. This report can help you to determine whether the natural language understanding of the application is aligned with user's questions. Using this report to track concept changes over time can help identify dictionary maintenance and tuning needs as well as content gaps.



The report displays a list of concepts ranked by the number of questions that contain them, followed by the total number of questions.

Month	Concept	Question Count	
CurrentMonth 2011-08	bird		3
CurrentMonth 2011-08	internet		2
CurrentMonth 2011-08	software		2
CurrentMonth 2011-08	topic		2
CurrentMonth 2011-08	China		1
CurrentMonth 2011-08	Germany		1
CurrentMonth 2011-08	cellular telephone		1
CurrentMonth 2011-08	design		1
CurrentMonth 2011-08	explanation		1
CurrentMonth 2011-08	fly		1
CurrentMonth 2011-08	no		1
CurrentMonth 2011-08	plan		1
CurrentMonth 2011-08	post		1
CurrentMonth 2011-08	question		1
CurrentMonth 2011-08	real number		1
CurrentMonth 2011-08	scratch		1
CurrentMonth 2011-08	season		1
CurrentMonth 2011-08	sky		1
CurrentMonth 2011-08	structure		1
CurrentMonth 2011-08	thousand		1
CurrentMonth 2011-08	user		1
CurrentMonth 2011-08	wireless		1



You can select a concept to drill down to details on the questions that contain the concept:

Month	Concept	Question ID	Question Count
CurrentMonth 2011-08	software	3.00	1
CurrentMonth 2011-08	software	25.00	1

You can set the start and end dates for the report, and select specific months within the reporting period to display data for. You can filter the report using the following prompts:

**User** The user ids associated with the questions.

**Language** The language of the question.

Questions corresponding to a specified system confidence level (low,

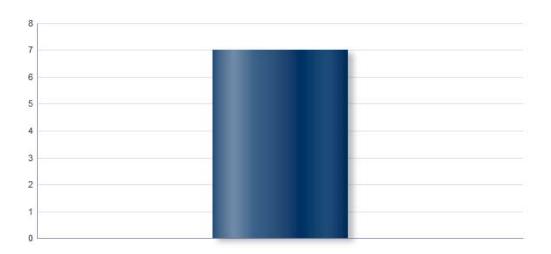
Confidence Level medium, and high) indicating how well the responses should match the

user's request.

36 The Facet Usage Report

# The Facet Usage Report

The **Facets Usage Report** provides insight on how users are interacting with the search results. The application's purpose is to provide the best answers to the user's question; users typically filter using the facet tree to refine their search when the original results are not precise enough. High click thru rates on specific facets can help identify business rules that require tuning to improve the user's initial search results.



Facet Name	Session Start Time	Session Count	Facet Level
CMS-CHANNEL	8/29/2011 12:26:44 AM	1	2
CMS-CHANNEL Total		1	
CMS-FORUM	8/28/2011 11:52:26 PM	1	2
CMS-FORUM Total		1	
COLLECTIONS	8/28/2011 11:57:40 PM	1	2
	8/29/2011 12:19:09 AM	1	2
COLLECTIONS Total		2	
DOC_TYPES	8/28/2011 11:45:40 PM	1	2
DOC_TYPES Total		2	
test_file	8/29/2011 12:01:36 AM	1	2
	8/29/2011 12:21:25 AM	1	2
test_file Total		2	

The report displays the following for each facet:

Session Count The number of sessions.

Facet Level The selected facet level.

**Language** The language of the question.

You can set the start and end dates for the report, and select specific months within the reporting period to display data for. You can filter the report using the following prompts:

**User** The user ids associated with the questions.

37 THE INTENT ANALYSIS REPORT

One or more defined subgroups of application users. User segments can

be user groups defined in Information Manager or defined in the Search

business rules.

**Language** The language of the question.

# The Intent Analysis Report

**User Segment** 

The Intent Analysis Report shows the number of intents that were matched within each session. It also tracks whether the intent was a direct match to the question asked by the user. You can use the **Question Details Report** from the **Session Usage Report** to get more detail about the questions that occurred within each session.

Session	Session Start Time	Intent Direct Match	Intent
1	8/28/2011 11:42:16 PM	YES	No Intent Match
	8/28/2011 11:43:13 PM	YES	No Intent Match
	8/28/2011 11:43:54 PM	NO	All Intents
		YES	Intent1
2	8/28/2011 11:47:04 PM	YES	No Intent Match
	8/28/2011 11:47:13 PM	NO	All Intents
		YES	Intent1
	8/28/2011 11:47:21 PM	NO	All Intents
			Intent1
			Intent2
			Intent3
		YES	Intent4
	8/28/2011 11:47:47 PM	NO	All Intents
			Intent1
			Intent2
			Intent3
		YES	Intent4
	8/28/2011 11:48:17 PM	YES	No Intent Match
3	8/28/2011 11:49:40 PM	NO	All Intents
		YES	Intent1
4	8/28/2011 11:50:41 PM	YES	No Intent Match
5	8/28/2011 11:51:16 PM	YES	No Intent Match
	8/28/2011 11:51:41 PM	YES	No Intent Match
	8/28/2011 11:53:08 PM	YES	No Intent Match
6	8/28/2011 11:57:11 PM	YES	No Intent Match

You can set the start and end dates for the report, and select specific months within the reporting period to display data for. You can filter the report using the following prompts:

**Query Source** 

The source, such as Web, from which the search action originated. InfoCenter defines several query sources such as content list or search results. Your application may also use custom query sources to provide a better understanding of how users interact with your knowledge base.

Intent

The intents occurring within the sessions reported on.

# The Concept Analysis Report

The Concept Analysis Report shows concepts within a session, and indicates whether the concept exactly matched the term in the user's question. Direct matches indicate that the application is well-tuned and understands user requests.

You can use the **Question Details Report** from the **Session Usage Report** to get more details about the questions that occurred within each session.

Session	Session Start Time	Concept Direct Match	Concept
1	8/28/2011 11:43:13 PM	Yes	structure
	8/28/2011 11:43:54 PM	Yes	software
2	8/28/2011 11:47:13 PM	Yes	fly
	8/28/2011 11:47:21 PM	No	doudland
			fly
			sky
		Yes	bird
	8/28/2011 11:47:47 PM	No	doudland
			fly
			sky
		Yes	bird
	8/28/2011 11:48:17 PM	Yes	cellular telephone
			wireless
3	8/28/2011 11:49:40 PM	Yes	scratch
5	8/28/2011 11:51:16 PM	Yes	internet
	8/28/2011 11:51:41 PM	Yes	topic
6	8/28/2011 11:57:11 PM	Yes	real number
7	8/28/2011 11:59:39 PM	Yes	thousand
	8/29/2011 12:00:13 AM	Yes	Germany
8	8/29/2011 12:07:23 AM	No	fly
		Yes	sky
	8/29/2011 12:09:51 AM	No	fly
		Yes	season
	8/29/2011 12:10:53 AM	No	cloudland
			fly

For each session, the report lists

Concept Direct Match Whether the concept is matched exactly based on the business rules. An indirect match

occurs when the concept was matched through a relationship (for example, child, parent,

or sibling) to the base concept.

**Concept** The concept that was matched in the question.

You can set the start and end dates for the report, and select specific months within the reporting period to display data for. You can filter the report using the following prompts:

Query Source The source, such as Web, from which the search action originated. InfoCenter defines

several query sources such as content list or search results. Your application may also use custom query sources to provide a better understanding of how users interact with

your knowledge base.

**Concept** The products or concepts that users include in their questions.

CHAPTER 6

# Report Description Details

This section explains aspects of the report descriptions at a more detailed level. It includes sections on Activity Types and Normalized Questions.

# **Activity Types**

The following table describes the types of user activities that Oracle Knowledge Analytics reports on:

Basic Search User input in the Search field.

**Facet Selection Search** User selecting a facet to refine search.

Process Wizard Invocation User invoking a process wizard.

**Process Wizard Stepping** User clicking to select the next step in a process wizard.

Process Wizard Completion User completing a process wizard.

**Process Wizard Completion** 

and Search

User completing a process wizard with a search action.

Click-thru User clicking on a search result or answer.

**Rating Question** User selecting a rating from the results rating question.

User Feedback
User providing feedback on the search results.
User has submitting a case and creating an SR.
User affirming that their problem was solved.

**Escalation Attempt** User selecting 'Submit SR'.

**Escalation No Answer and** 

Completed

User receiving no answer and completing an escalation.

Paging User paging through search results.

Session Started User beginning a search session.

## Normalized Questions

Oracle Knowledge Analytics groups similar user questions together in a combined form called a normalized question. A normalized question is a single phrase that represents some number of actual questions expressed in varying language, but having the same essential meaning. For example, the user questions:

- 411 service charge
- 411 cost
- Charge for information call

have the same meaning, and are treated by Analytics as a single question.

