



Oracle Knowledge Intelligent Search Language Reference

Oracle Knowledge Application Intent Libraries

Oracle Knowledge Version 8.5
Document Number OKIS-LREF85-00
October 27, 2012

Oracle, Inc.

COPYRIGHT INFORMATION

Copyright © 2002, 2012, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS

Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are “commercial computer software” or “commercial technical data” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle America, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. Other names may be trademarks of their respective owners.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Preface	About This Guide	1
	In This Guide	1
	Screen and Text Representations	1
	References to World Wide Web Resources	1
Chapter 1	IML and VIL Reference	2
	IML and VIL Quick Reference	3
	IML Processing	4
	Direct IML Expressions	4
	Question Patterns	4
	IML Syntax	4
	General IML Syntax Rules	4
	IML Elements	5
	Basic Expressions	5
	“...” (Double Quotes) Literal Expressions	5
	‘...’ (Single Quotes) Canonical Form Expressions	6
	<...> (Angle Brackets) Concept Expressions	7
	Default Concept Reference Values	7
	[...] (Square Brackets) Cluster Expressions	8
	Operators	8
	Types of Operators	8
	Range Operators	8
	NEAR Proximity Operator	9
	DOC Document Operator	10
	SENT Sentence Operator	10
	TITLE Title Operator	11
	SUBTITLE Subtitle Operator	11
	SECTION Section Operator	11
	REFERENCE Reference Operator	12
	FACET Facet Operator	12
	CHARMATCH Character Match Operator	13

CHILDREN Children Operator	13
ALLCHILDREN All Children Operator	13
Combining Operators	14
IS Intersection Operator	14
OR Union Operator	15
X,Y(comma) or X AND Y	15
ISNT Difference Operator	15
WITHOUT Difference Offset Operator	16
OVERLAP Offset Intersection Operator	16
NOOVERLAP Difference Intersection Operator	16
Keywords	17
WORD Keyword	17
BEGIN Keyword	18
END Keyword	18
THIS Keyword	19
Number Expressions	19
General Rules for Specifying Number Expressions	20
(...-...)Simple Range	20
(...-) Ascending Range	21
(-...) Descending Range	21
+ * Macros	22
Zero or More Words Macro	22
One or More Words Macro	22
IML Variables	23
==VARIABLE, =#VARIABLE Specifying Variables	23
Assigning Values to Variables	24
Referring to Variables	24
/*...*/ Comments	24
The Variable Instantiation Language (VIL)	26
VIL Syntax	26
VIL Function Processing	26
VIL Function Input	26
VIL Function Output	27
Combining VIL Functions	27
-> VIL Operators and Delimiters	28
Non-Applicable and Null Output Strings	28
VIL Parameters	29
VIL Functions	30
ALIAS The Alias Function	30
INHERIT The Inherit Function	31
MORPH The Morphology Function	34
NOVAR The Novar Function	34
ONTOLOGY The Ontology Function	35
Ontology Traversal Functions	36
REPLACE The Replace Function	37
STRING The String Function	37
TEXT The Text Function	38
The Capitalize Operation	39
The Concatenate Operation	40
The Count Operation	40
The Lowercase Operation	41

The Replace Character Operation	41
The Sort Operation	42
The Tokenize Operation	42
The Trim Operation	43
The Unique Operation	43
The Uppercase Operation	44
USERDATA The User Data Function	44
DATE The Date Function	45
Chapter 2 The General Intent Library Hierarchy	46
General Application Product Ordering and Sales Support Intents	46
Product Ordering and Sales Support	47
Make Order	47
Track Order	48
Product Rebates Inquiry	48
Warranty Inquiry	49
Product Insurance Inquiry	49
General Application Account Support Intents	50
Account Support	50
Update Account Profile	50
Close Account	51
Account Information Inquiry	51
Account Setup Support	52
Account Sign In Help	52
General Application Customer Service Inquiry Intents	53
Customer Service Inquiry	53
Contact Customer Service	54
Escalate Customer Help	54
General Application Billing Inquiry and Support Intents	55
Billing Inquiry and Support	55
Payment Options and Payment Support	56
Dispute Bill	56
Balance Inquiry	57
View Bill Details	57
Understanding a Bill	58
Request Bill Copy	58
Billing Refund Inquiry	59
General Application General Company Inquiry Intents	59
General Company Inquiry	59
Office Location Inquiry	60
Job Employment Inquiry	60
Privacy Inquiry	61
Company Business Hours Inquiry	61
General Application Website Inquiry Intents	62
Website Inquiry	62
Website Spanish Language Support	62
Website Sitemap Inquiry	63
General Application Intent Parameters	63
Products Parameter	64
Your_Company_Name Parameter	64

Chapter 3	The Automotive Intent Library Hierarchy	65
Automotive Product Research Intents		65
Product Research		66
Vehicle Adaptive Equipment		67
Competitive Comparison		68
Concept Vehicle Inquiry		68
Fuel Efficiency Research		68
Environmental Impact Research		69
Model Price Research		69
Used Vehicle Research		70
Certified Vehicle Research		70
Vehicle Engineering Research		71
Vehicle Media Information		71
Model Picture Research		72
Vehicle Brochure Request		72
Vehicle Configuration Research		73
Vehicle Accessory Research		74
Model Exterior Color Research		74
Model Interior Color Research		75
Vehicle Option Research		75
Vehicle Model Line Research		76
Vehicle Model Research		76
Vehicle Model Trim Research		77
Forthcoming Model Research		78
Vehicle Safety Research		78
Vehicle Specs Research		79
Towing Capacity Specs Research		79
Vehicle Type Research		80
Automotive Marketing Program Intents		80
Marketing Programs		80
Merchandise Research		81
Racing Sponsorships Inquiry		81
Special Offer Inquiry		82
Vehicle Show Information		82
Automotive Financing and Sales Support Intents		82
Financing and Sales Support		83
Trade In Sales Inquiry		83
Vehicle Financing Sales Inquiry		83
Vehicle Leasing Research		84
Vehicle Warranty Research		84
Vehicle Extended Warranty Research		85
Automotive Support and Maintenance Intents		85
Owner Support and Maintenance		85
Used Vehicle Market Value Support		86
Owner Manual Request		86
Radio Security Code Support		87
Scheduled Maintenance Support		87
Vehicle Parts Research		88
Vehicle Recall Inquiry		88
Vehicle Troubleshooting Support		89

Automotive Customer Service Inquiry Intents	89
Customer Service Inquiry	89
Contact Customer Service	90
Escalate Customer Service	90
Automotive General Company Inquiry Intents	90
General Company Inquiry	91
Dealer Locator Inquiry	91
Job Employment Inquiry	91
Automotive Website Inquiry Intents	92
Website Inquiry	92
Website Sitemap Inquiry	92
Website Spanish Language Support	93
Automotive Intent Parameters	93
Accessory Parameter	94
Brand Parameter	94
Car Type Parameter	95
Certified Year Parameter	95
City Parameter	95
Competitor Make Parameter	96
Competitor Model Parameter	96
Concept Car Parameter	96
Current Model Parameter	97
Current Year Parameter	97
Discontinued Model Parameter	97
Engineering Feature Parameter	98
Forthcoming Model Parameter	98
Maintenance Activity Parameter	98
Merchandise Parameter	99
Model Parameter	99
Non-Certified Year Parameter	101
Option Package Parameter	101
Part Parameter	101
Previous Year Parameter	102
Special Offer Parameter	102
Specification Parameter	102
Standard Option Parameter	103
State Parameter	103
Trim Parameter	103
Year Parameter	104
Zip Code Parameter	105
Chapter 4 The Telecommunications Intent Library Hierarchy	106
Using Product Research and Product Support Intents	106
Telecom Product Research Intents	107
Product Research	108
Service Plan Research	109
Internet Services Research	109
Prepaid Services Research	110
Service Feature Research	110

Text Messaging Research	111
Instant Messaging Research	111
Email Management Research	112
Calling Areas / Coverage Research	112
Roaming and Cell Phone Network Research	113
Voicemail Management Research	113
Personalization and Content Management Research	114
Ringtones Research	114
Service Plan Minutes Research	115
Purchasing Minutes Research	116
Call Services Research (including Star Keys)	116
Call Block Research	117
Caller ID Research	117
Additional Line or Phone Request Research	118
Phone Equipment Research	118
Wireless Phone Research	119
Camera Phone Research	119
PDA Research	120
Non-Wireless Phone Research	120
Phone Equipment Accessory and Parts Research	121
Other Telco Services Research	122
International Calling Research	122
Calling Card Research	123
Disabled Services Research	123
Telecom Product Support Intents	124
Product Support	125
Service Plan Support	126
Internet Services Support	126
Prepaid Services Support	127
Change Plans	127
Change Service Providers	128
Relocation Support	129
Service Suspension / (Re-)Activation Support	129
Cancel Plan	130
Contract Expiration Support	130
Service Feature Support	131
Text Messaging Support	131
Instant Messaging Support	132
Email Management Support	132
Calling Areas / Coverage Support	133
Roaming and Cell Phone Network Support	133
Voicemail Management Support	134
Personalization and Content Management Support	134
Ringtones Support	135
Service Plan Minutes Support	136
Purchasing Minutes Support	136
Call Services Support (Star Keys)	137
Call Block Support	137
Caller ID Support	138
Additional Line or Phone Request Support	138
Phone Equipment Support	139

Wireless Phone Support	139
Wireless Camera Phone Support	140
Wireless PDA Support	140
Non-Wireless Phone Support	141
Phone Equipment Accessory and Parts Support	141
Upgrade Phone	142
Unlock Phone Password Codes	142
Phone Equipment Documentation	143
Other Telco Services Support	143
International Calling Support	144
Calling Card Support	144
Disabled Services Support	145
Directory Info Support	145
Number Portability Inquiry	146
Area/Country Lookup	146
Reverse Number Lookup	147
Telecom Product Ordering and Sales Support Intents	147
Product Ordering and Sales Support	148
Make Order	148
Track Order	149
Product Rebates Inquiry	149
Warranty Inquiry	150
Product Insurance Inquiry	150
Telecom Account Support Intents	151
Account Support	151
Update Account Profile	151
Close Account	152
Account Information Inquiry	152
Account Setup Support	153
Account Sign In Help	153
Telecom Customer Service Intents	154
Customer Service Inquiry	154
Contact Customer Service	155
Schedule Service Appointment	155
Escalate Customer Help	156
Report Abuse/Fraud	156
Report Network/Signal Problem	157
Report Lost Phone	157
Telecom Billing and Support Intents	158
Billing and Support Inquiry	158
Payment Options and Payment Support	159
Dispute Bill	159
Balance Inquiry	160
View Bill Details	160
Understanding a Bill	161
Request Bill Copy	161
Billing Refund Inquiry	162
Telecom General Company Inquiry Intents	162
General Company Inquiry	162
Office Location Inquiry	163
Job Employment Inquiry	163

Privacy Inquiry	164
Company Business Hours Inquiry	164
Telecom Website Inquiry Intents	165
Website Inquiry	165
Website Spanish Language Support	165
Website Sitemap Inquiry	166
Telecom Intent Parameters	166
Call Services Parameter	167
Cell Phones Parameter	167
Internet Services Parameter	167
Internet Plans Parameter	168
Landline Phones Parameter	168
Pay As You Go Plans Parameter	168
PDA Parameter	169
Personalized Content Parameter	169
Prepaid Phone Cards Parameter	169
Telecom Accessories Parameter	170
Telecom Parts Parameter	170
Telecom Products Parameter	170
Telecom Service Plans Parameter	171
Telecom Service Providers Parameter	171
Telephones Parameter	171
Your Company Name Parameter	172
Telecom Standard Test Questions	172
Account Information Inquiry Standard Questions	173
Account Setup Support Standard Questions	175
Account Sign In Help Standard Questions	175
Account Support Standard Questions	178
Additional Line or Phone Request Research Standard Questions	178
Additional Line or Phone Request Support Standard Questions	179
Area Or Country Lookup Standard Questions	180
Balance Inquiry Standard Questions	180
Billing and Support Inquiry Standard Questions	184
Billing Refund Inquiry Standard Questions	187
Call Block Research Standard Questions	187
Call Block Support Standard Questions	187
Call Services Research Standard Questions	188
Call Services Support Standard Questions	188
Caller ID Research Standard Questions	190
Caller ID Support Standard Questions	190
Calling Areas And Coverage Research Standard Questions	190
Calling Card Research Standard Questions	192
Calling Card Support Standard Questions	192
Camera Phone Research Standard Questions	192
Camera Phone Support Standard Questions	193
Cancel Plan Standard Questions	193
Change Plans Standard Questions	193
Change Service Providers Standard Questions	194
Close Account Standard Questions	194
Company Business Hours Inquiry Standard Questions	196
Contact Customer Service Standard Questions	196

Contract Expiration Support Standard Questions	198
Customer Service Inquiry Standard Questions	198
Directory Info Support Standard Questions	200
Dispute Bill Standard Questions	200
Email Management Research Standard Questions	201
Email Management Support Standard Questions	201
Escalate Customer Help Standard Questions	203
General Company Inquiry Standard Questions	203
Instant Messaging Research Standard Questions	203
International Calling Research Standard Questions	204
International Calling Support Standard Questions	206
Internet Services Research Standard Questions	206
Internet Services Support Standard Questions	208
Job Employment Inquiry Standard Questions	208
Make Order Standard Questions	208
Non-Wireless Phone Research Standard Questions	209
Non-Wireless Phone Support Standard Questions	209
Number Portability Inquiry Standard Questions	209
Office Location Inquiry Standard Questions	210
Payment Options and Payment Support Standard Questions	210
PDA Research Standard Questions	213
PDA Support Standard Questions	213
Personalization and Content Management Research Standard Questions	215
Personalization and Content Management Support Standard Questions	217
Phone Equipment Accessory and Parts Research Standard Questions	217
Phone Equipment Accessory and Parts Support Standard Questions	218
Phone Equipment Research Standard Questions	220
Phone Equipment Documentation Standard Questions	220
Phone Equipment Support Standard Questions	220
Prepaid Services Research Standard Questions	224
Prepaid Services Support Standard Questions	224
Privacy Inquiry Standard Questions	225
Product Rebates Inquiry Standard Questions	225
Product Research Standard Questions	226
Purchasing Minutes Research Standard Questions	226
Purchasing Minutes Support Standard Questions	226
Report Abuse Or Fraud Standard Questions	226
Report Lost Phone Standard Questions	227
Report Network Or Signal Problem Standard Questions	227
Request Bill Copy Standard Questions	227
Reverse Number Lookup Standard Questions	228
Ringtones Research Standard Questions	228
Ringtones Support Standard Questions	230
Roaming and Cell Phone Network Research Standard Questions	230
Roaming and Cell Phone Network Support Standard Questions	230
Schedule Service Appointment Standard Questions	231
Service Feature Research Standard Questions	231
Service Feature Support Standard Questions	232
Service Plan Minutes Research Standard Questions	232
Service Plan Minutes Support Standard Questions	234
Service Plan Research Standard Questions	234

Service Plan Support Standard Questions	237
Service Suspension Or Reactivation Support Standard Questions	237
Text Messaging Research Standard Questions	237
Text Messaging Support Standard Questions	239
Track Order Standard Questions	241
Understanding a Bill Standard Questions	241
Unlock Phone Password Codes Standard Questions	243
Update Account Profile Standard Questions	243
Upgrade Phone Standard Questions	245
View Bill Details Standard Questions	245
Voicemail Management Research Standard Questions	247
Voicemail Management Support Standard Questions	247
Website Inquiry Standard Questions	249
Website Spanish Language Support Standard Questions	249
Wireless Phone Research Standard Questions	249
Wireless Phone Support Standard Questions	251

About This Guide

This guide provides reference information for the Oracle Knowledge Intent Libraries. This guide is intended for Dictionary and application developers who need access to detailed information about Oracle Knowledge language processing components.

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 *Intelligent Search Language Reference* is divided into the following sections:

Chapter 1, IML and VIL Reference	This chapter describes the Oracle Knowledge Match Language (IML) and Variable Instantiation Language (VIL).
Chapter 2, The General Intent Library Hierarchy	This chapter provides descriptions of the Intents and Concept Parameters in the standard General Application Intent Library.
Chapter 3, The Automotive Intent Library Hierarchy	This chapter provides descriptions of the Intents and Concept Parameters in the standard Automotive Intent Library.
Chapter 4, The Telecommunications Intent Library Hierarchy	This chapter provides descriptions of the Intents and Concept Parameters in the standard Telecommunications Intent Library.

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.

IML and VIL Reference

Oracle Knowledge Match Language (IML) is a language for specifying conditions and actions based on matching words, phrases, and concepts in user requests and application content. IML consists of a set of symbols that define various functions and operations. You specify these symbols in combination with words of interest to form IML expressions. The set of characters, their functions, and the rules for using them to create IML expressions are described in “IML Syntax” on page 4.

IML provides a flexible means of matching the words in a user request. IML can match a literal word, multiple forms of a word, or even concepts that match or relate to a specified word in some way. You can create IML expressions that match very specifically-worded requests, or that match many general requests that express the same purpose, or intent.

IML expressions are components of Rules; the pre-defined Rules in the Dictionary contain IML expressions that specify both conditions and actions.

You can add and modify IML expressions in question patterns that set conditions and in Search Components that specify search criteria within Actions.

During request processing, the Rules Engine processes the IML within Rule conditions and actions, as described in “IML Processing” on page 4.

Please see “The Variable Instantiation Language (VIL)” on page 26 for more information on VIL.

IML and VIL Quick Reference

“IML Syntax” on page 4

- “...” (Double Quotes) Literal Expressions” on page 5
- “...’ (Single Quotes) Canonical Form Expressions” on page 6
- “<...> (Angle Brackets) Concept Expressions” on page 7
- “NEAR Proximity Operator” on page 9
- “DOC Document Operator” on page 10
- “SENT Sentence Operator” on page 10
- “TITLE Title Operator” on page 11
- “SUBTITLE Subtitle Operator” on page 11
- “SECTION Section Operator” on page 11
- “REFERENCE Reference Operator” on page 12
- “FACET Facet Operator” on page 12
- “CHARMATCH Character Match Operator” on page 13
- “ALLCHILDREN All Children Operator” on page 13
- “IS Intersection Operator” on page 14
- “X,Y(comma) or X AND Y” on page 15
- “OR Union Operator” on page 15
- “ISNT Difference Operator” on page 15
- “WITHOUT Difference Offset Operator” on page 16
- “OVERLAP Offset Intersection Operator” on page 16
- “NOOVERLAP Difference Intersection Operator” on page 16
- “WORD Keyword” on page 17
- “BEGIN Keyword” on page 18
- “END Keyword” on page 18
- “THIS Keyword” on page 19
- “+ * Macros” on page 22
- “(...-...)Simple Range” on page 20
- “(...-) Ascending Range” on page 21
- “==VARIABLE, =#VARIABLE Specifying Variables” on page 23
- “(-...) Descending Range” on page 21
- “/*...*/ Comments” on page 24

“VIL Syntax” on page 26

- “-> || VIL Operators and Delimiters” on page 28
- “ALIAS The Alias Function” on page 30
- “INHERIT The Inherit Function” on page 31
- “MORPH The Morphology Function” on page 34
- “NOVAR The Novar Function” on page 34
- “ONTOLOGY The Ontology Function” on page 35
- “REPLACE The Replace Function” on page 37
- “STRING The String Function” on page 37
- “TEXT The Text Function” on page 38
- “USERDATA The User Data Function” on page 44
- “DATE The Date Function” on page 45

IML Processing

The Rules Engine processes IML during request processing. You can specify IML expressions to match words and phrases in both user requests and application content.

To match words, phrases, and intents within user requests, you specify IML expressions to create question patterns within Rules. To match words and phrases within unstructured application content, you can:

- Use the Dictionary's pre-defined Search Components, which are written in IML
- Specify IML expressions within custom Search Components
- Specify IML expressions to retrieve specific answers
- Specify IML expressions to restrict the results of SQL queries to configured sources of structured information

Direct IML Expressions

You can specify IML expressions to perform direct retrieval of excerpts from unstructured content. The Rules Engine's default ranking process uses IML to match indexed unstructured content to the user requests. In some cases, you may want to specify an explicit IML expression instead of using the default ranking function.

To specify a direct IML expression for document retrieval, you enter an IML expression in the Answer Section tab in the Actions section of the Dictionary Manager Rule window.

Question Patterns

A Question Pattern is an IML expression that is designed to match the intent of a user request. Question Patterns are one of the components of Rules that you can use to set conditions. Question Patterns range from simple, general expressions to complex, specific ones.

You specify Question Patterns using the various elements of IML to match the words and phrases that occur in user requests.

During request processing, the Rules Engine compares the request to the specified Question Pattern, and evaluates it as true or false. If a Rule is true, the Actions that it specifies will be added to the action list.

To use a Question Pattern within a Rule, you enter an IML expression in the Question Patterns tab in the Conditions section of the Dictionary Manager Rule window, as described in “Intelligent Search Optimization Guide”.

IML Syntax

The IML syntax defines multiple elements that you can use to create IML expressions within question patterns, search components, and direct index queries. You create IML expressions by combining the various elements according to the syntax rules.

General IML Syntax Rules

There are no special delimiters to indicate the beginning or end of IML expressions. You generally specify IML expressions in designated fields within Dictionary Manager windows.

You can organize IML expressions in Dictionary Manager fields in any way that you choose. The Rules Engine reads IML expressions from left to right, top to bottom. Line breaks and spaces do not have any function.

Note: The **AND** separator is a functionally identical alternative to the comma separator, and is not an operator. It separates arguments, but does not specify any operation.

Arguments for expressions are delimited by parentheses, and separated by commas, or by the string **AND** if preferred for clarity. You can create nested expressions using parentheses to delimit the enclosed expressions, and there is no limit to the levels of nesting.

IML Elements

IML supports the following types of elements:

- “Basic Expressions” on page 5
- “Operators” on page 8
- “Keywords” on page 17
- “+ * Macros” on page 22
- “Number Expressions” on page 19
- “IML Variables” on page 23
- “/*...*/ Comments” on page 24

Some IML elements allow additional arguments that specify or modify their behavior.

Basic Expressions

Basic IML expressions are the means of specifying semantic matching for words and phrases in user requests and in the indexed content. Basic expressions generally resolve to single units of meaning within user requests or application content. Within indexed application content, single units of meaning occupy a designated position, and are referred to as *offsets*.

The various types of base expressions enable you to match words and phrases as literal character strings, canonical forms that include variations in wordform and punctuation, and concepts that include semantic relations as defined in the Ontology.

You can combine basic expressions with other IML elements to describe and match complex semantic structures. The following basic expressions are valid in IML:

- “...” (Double Quotes) Literal Expressions” on page 5
- “...” (Single Quotes) Canonical Form Expressions” on page 6
- “<...> (Angle Brackets) Concept Expressions” on page 7
- “[...] (Square Brackets) Cluster Expressions” on page 8

“...” (Double Quotes) Literal Expressions

A literal expression matches only the exact specified character string. Literal expressions are sensitive to punctuation and spacing.

Syntax:

Enclose the word or phrase within double quotes, in the form:
 "expression"

Example:

The expression...	matches...	and does not match...
"cat"	Cat cat	cats

'..' (Single Quotes) Canonical Form Expressions

Canonical form expressions match the specified string and any variations in inflection or form, such as capitalization, tense, or other valid morphological variations as defined by the Language Analyzer.

Syntax:

Specify canonical form expressions using either of the following forms:

expression
 'expression'

where:

expression	Is a non-quoted string beginning with a lower case letter, succeeded by any alphanumeric characters, with no punctuation or spaces
'expression'	Is any alphanumeric string enclosed within single quotes, including punctuation and spaces

Example:

The expression...	matches...	and does not match...
cat 'cat'	Cat cats Cats cat's catty	catalog

<...> (Angle Brackets) Concept Expressions

Concept expressions match occurrences of the specified concept and its synonyms. Concept expressions refer to the sense of the specified concept that is currently defined in the Dictionary. See the “Intelligent Search Language Tuning Guide” for information on defining concepts in the Dictionary.

Syntax:

Specify the concept name as defined in the Dictionary, within angle brackets. The Rules Engine assigns default values to the first two identifiers within a concept reference if they are not specified. You can omit one or both of these identifiers to apply the default values to the specified concept. The complete form of the concept reference is:

<pos.domain.name>

Other valid forms are:

<name>

where:

pos	Specifies the concept's <i>part of speech</i> . Valid values are <code>noun</code> , <code>adj</code> (adjective), <code>verb</code> , and <code>adv</code> (adverb). This identifier is optional. The default part of speech value is <code>noun</code> .
domain	Specifies the <i>domain</i> that the concept is assigned to. This identifier is optional. The default domain is the application domain name, as specified in the Dictionary.
name	Specifies the concept name, which is an indicator for the collection of specified synonyms and other relationships that define the concept

Example:

The expressions...	match...	and do not match...
<noun.animal.cat> <animal.cat>	Cat cats kitten	catalog

DEFAULT CONCEPT REFERENCE VALUES

The following table describes the default values that the Rules Engine assigns when processing concept references.

If you specify...	the Rules Engine assigns...
<pos.domain.headword>	No default values.
<headword>	The part of speech value <code>noun</code> and the default domain value <code>application name</code> , as specified on the Application Instance page of the Advanced Configuration Facility.

[...] (Square Brackets) Cluster Expressions

Cluster expressions match occurrences of the specified Cluster Object. Cluster expressions refer to the sense of the specified Cluster that is currently defined in the Dictionary. See the “Intelligent Search Language Tuning Guide” for information on defining Cluster in the Dictionary.

Syntax:

Specify the Cluster name as defined in the Dictionary, within square brackets. The Rules Engine assigns default values to the first two identifiers within a Cluster reference if they are not specified. You can omit one or both of these identifiers to apply the default values to the specified Cluster. The complete form of the concept reference is:

[name]

Example:

The expressions...	match...	and do not match...
[house pet]	Cat dog feline	catalog

Operators

You can specify IML operators to define the portion, or *range*, of a request or document that you want an IML expression to match.

For example, you can specify operators to apply expressions to:

- Sentences within documents
- Entire documents
- Sentences within documents having titles that match a specified expression

Types of Operators

The following types of operators are available in IML:

- Range operators
- Combining operators

Range operators specify the scope of the matching criteria set by a specified expression. For example, you could specify IML expressions to match the words cat and hat occurring within a single sentence, or within 5 words of each other. Some range operators apply to both conditions (requests) and actions (documents); others apply only to actions.

Combining operators specify operations on specified ranges to further define matching criteria. Examples of combinations include intersections, unions, and overlaps.

Range Operators

Range operators specify the scope of a matched expression. You can use range operators to specify the amount of content that the Rules Engine will associate with the matched expression.

For example, a literal expression "cat" will match any occurrences of the string cat. A sentence range operator specifies that this expression will apply to, or match, sentences that contain the string cat. A document range operator specifies that this expression will match documents that contain the string cat.

You specify range operators as prefixes to the expressions that they operate on. You specify the expressions that the range operator applies to as arguments enclosed within parentheses. You must specify at least one argument for an operator.

You separate arguments with a , (comma) or the string AND. The expressions that you specify as arguments can be any valid IML expressions.

You can use range operators within IML expressions that specify conditions and actions within Rules; however, not all range operators are valid in both contexts.

The following IML range operators apply to both conditions (requests) and actions (documents):

- Proximity (NEAR), as described in "NEAR Proximity Operator" on page 9
- Document (DOC), as described in "DOC Document Operator" on page 10

The following IML range operators apply only to actions:

- Sentence (SENT), as described in "SENT Sentence Operator" on page 10
- Title (TITLE), as described in "TITLE Title Operator" on page 11
- Subtitle (SUBTITLE), as described in "SUBTITLE Subtitle Operator" on page 11
- Section (SECTION), as described in "SECTION Section Operator" on page 11
- Reference (REFERENCE), as described in "REFERENCE Reference Operator" on page 12

NEAR Proximity Operator

The proximity (NEAR) operator returns a range of words that contains all of the expressions specified as arguments. You specify the size of the range as a parameter, n.

NEAR is valid within conditions and actions.

Syntax:

```
NEAR_n([expression]{separator[expression]}...)
```

where:

n	Specifies the number of words (offsets) that defines the range. Offsets indicate unique index positions, approximately equal to single words.
expression	Specifies a valid IML expression
separator	Specifies a separator, if required (, or AND)

Example:

Specify	NEAR_5 (<cat>, <hat>)
To match	Content having both of the concepts (synonyms for) <code>cat</code> and <code>hat</code> within a 5 word range

DOC Document Operator

The document (`DOC`) operator returns documents containing all of the expressions specified as arguments. Documents are identified during content processing. The sentence object, which contains the user request, is considered to be a document. See “Intelligent Search Optimization Guide” for more information about the sentence object.

`DOC` is valid within conditions and actions.

Syntax:

`DOC([expression]{separator[expression]} }...}`

where:

<code>expression</code>	specifies a valid IML expression
<code>separator</code>	specifies a separator, if required (, or AND)

Example:

Specify	<code>DOC (<cat>, <hat>)</code>
To match	documents containing both of the concepts (synonyms of) <code>cat</code> and <code>hat</code>

SENT Sentence Operator

The sentence (`SENT`) operator returns sentences that contain the specified expressions. Sentences are identified during content processing and are stored in the Content Store.

`SENT` is valid only within actions.

Syntax:

`SENT([expression]{separator[expression]} }...}`

where:

<code>expression</code>	Specifies a valid IML expression
<code>separator</code>	Specifies a separator, if required (, or AND)

Example:

Specify	SENT (<cat>, <hat>)
To match	Sentences containing both of the concepts <code>cat</code> and <code>hat</code>

TITLE Title Operator

The title (**TITLE**) operator returns document titles that contain the expressions specified as arguments. Document titles are identified during content processing and are stored in the Content Store.

TITLE is valid only within actions.

Syntax:

TITLE([expression]{separator[expression]} }...}

where:

<code>expression</code>	specifies a valid IML expression
<code>separator</code>	specifies a separator, if required (, or AND)

Example:

Specify	TITLE (<cat>, <hat>)
To match	document titles that contain both of the concepts (synonyms of) <code>cat</code> and <code>hat</code>

SUBTITLE Subtitle Operator

The subtitle (**SUBTITLE**) operator returns document subtitles that contain all of the expressions specified as arguments. Document subtitles are determined by content processing.

SUBTITLE is valid only within actions.

Syntax:

SUBTITLE([expression]{separator[expression]} }...}

where:

<code>expression</code>	Specifies a valid IML expression
<code>separator</code>	Specifies a separator, if required (, or AND)

Example:

Specify	SUBTITLE (<cat>, <hat>)
To match	Document sections having subtitles that contain both of the concepts (synonyms of) <code>cat</code> and <code>hat</code>

SECTION Section Operator

The section (**SECTION**) operator returns document sections that contain all of the expressions specified as arguments. Document sections are determined by content processing.

SECTION is valid only within actions.

Syntax:

SECTION([expression]{separator[expression]} }...}

where:

expression	specifies a valid IML expression
separator	specifies a separator, if required (, or AND)

Example:

Specify	SECTION (<cat>, <hat>)
To match	Document sections that contain both of the concepts (synonyms of) cat and hat

REFERENCE Reference Operator

The reference (REFERENCE) operator returns references to documents, such as hypertext links, that contain the expressions specified as arguments.

REFERENCE is valid only within actions.

Note: Only use the REFERENCE operator if the reference index has been enabled. The reference index is disabled by default, to enable it modify the #.xml file from <referenceNamespace>false</referenceNamespace> to <referenceNamespace>true</referenceNamespace>.

Syntax:

REFERENCE({expression} separator {expression})

where:

expression	specifies a valid IML expression
separator	specifies a separator, if required (, or AND)

Example:

Specify	REFERENCE (<cat>, <hat>)
To match	references that contain both of the concepts (synonyms of) cat and hat

FACET Facet Operator

The facet (FACET) operator returns documents assigned to a particular facet setup in the Personalized Navigation Facility.

Syntax:

FACET("name")

Example:

Specify	FACET ("manual")
To match	returns documents assigned to the Manual facet as specified in the Personalized Navigation Setup.

CHARMATCH Character Match Operator

The character match (CHARMATCH) operator matches the query against the regular expression argument.

CHARMATCH assumes implicit BEGIN and END markers to its argument. CHARMATCH sends its argument to the JAVA regular expression engine, so it uses the Java regex syntax. Operators like "*" or "+" are fulfilled to the maximum stretch. "?" makes the preceding character optional. For more information, search for Java Regex guides online.

Syntax:

CHARMATCH(regular expression)

Example:

The expression...	matches...	and does not match...
CHARMATCH ("c+ ?t")	cat Conneticut	cats

CHILDREN Children Operator

The Children operator matches on the Concept and the first level Concepts related to the specified Concept with a "is this type" relationship. The Concept name used with the the CHILDREN operator will be the "Parent" Concept, and will return the "children" of the Concept.

Syntax:

CHILDREN(<conceptname>)

Example:

The expression...	matches...	and does not match...
CHILDREN (<animal>)	cat dog	Garfield Odie

ALLCHILDREN All Children Operator

The All Children operator matches on the Concept and all the Concepts related to the specified Concept with a "is this type" relationship. The Concept name used with the the CHILDREN operator will be the "Parent" Concept, and will return all the "children" of the Concept.

Syntax:

ALLCHILDREN(<conceptname>)

Example:

The expression...	matches...	and does not match...
ALLCHILDREN(<animal>)	cat dog garfield odie	sink

Combining Operators

Combining operators specify operations on expressions or their associated ranges.

You can use combining operators to match an area of content that you define as the result of an operation on two or more specified ranges. You specify combining operators inline, between the expressions that they operate on. The expressions that you combine can be any valid IML expressions.

The following combining operators are valid in IML:

- **IS**, which specifies the intersection of two ranges, as described in “IS Intersection Operator” on page 14
- **OR**, which specifies the union of two ranges, as described in “OR Union Operator” on page 15
- **ISNT**, which specifies the difference of two ranges, as described in “ISNT Difference Operator” on page 15
- **WITHOUT**, which specifies the difference of two specified ranges, as described in “WITHOUT Difference Offset Operator” on page 16
- **OVERLAP**, which specifies a range representing the overlap of two ranges, as described in “OVERLAP Offset Intersection Operator” on page 16

IS Intersection Operator

The intersection (**IS**) combining operator specifies the intersection of the ranges of the specified expressions.

Syntax:

You specify the intersection combining operator in the form:
 {expression} **IS** {expression}

where:

expression Specifies a valid IML expression

Example:

Specify SENT (<cat> IS <hat>)
To match Sentences that contain the concepts (synonyms of) both `cat` and `hat`

OR Union Operator

The union (OR) combining operator specifies the union of the ranges of the specified expressions.

Syntax:

{expression} OR {expression}

where:

`expression` Specifies a valid IML expression

Example:

Specify SENT (<cat> OR <hat>)
To match Sentences that contain the either of the concepts (synonyms of) `cat` or `hat`

X,Y(comma) or X AND Y

Using the comma or AND requires that all terms must be matched in order for the question pattern to be satisfied. “,” and AND must be used in conjunction with “Range Operators” on page 8, for example DOC.

Syntax:

RANGE OPERATOR ({expression}, {expression})
 RANGE OPERATOR ({expression} AND {expressions})

Example:

The expression...	matches...	and does not match...
DOC (cat, dog)	cat dog	cat
SENT (cat AND dog)	dog with cat cat with a fat dog	dog

ISNT Difference Operator

The difference (ISNT) combining operator specifies the difference of ranges of the specified expressions.

Syntax:

{expression} ISNT {expression}

where:

`expression` Specifies a valid IML expression

Example:

Specify	<code>SENT(<cat>) ISNT SENT(<hat>)</code>
To match	Sentences that contain the concept (synonyms of) <code>cat</code> , excluding sentences that also include the concept <code>hat</code>

WITHOUT Difference Offset Operator

The difference offset (**WITHOUT**) combining operator specifies the range of difference of the specified expressions.

Syntax:

`{expression} WITHOUT {expression}`

where:

<code>expression</code>	Specifies a valid IML expression
-------------------------	----------------------------------

Example:

Specify	<code>DOC(<cat>) WITHOUT SENT(<hat>)</code>
To return	Documents that contain the concept (synonyms of) <code>cat</code> , excluding sentences that include the concept <code>hat</code>

Note: This example may return multiple matches within a single document.

OVERLAP Offset Intersection Operator

The offset intersection (**OVERLAP**) combining operator specifies the ranges representing the overlap of all arguments. The overlap operator returns the portion of the text that the specified expressions have in common.

Syntax:

`{expression}OVERLAP{expression}`

where:

<code>expression</code>	Specifies a valid IML expression that the operator will apply to.
-------------------------	---

Example:

Specify	<code>SUBTITLE(cat) OVERLAP hat</code>
To match	Occurrences of <code>hat</code> located within sections that have <code>cat</code> in their subtitles

NOOVERLAP Difference Intersection Operator

The difference offset (**NOOVERLAP**) combining operator specifies the difference of all ranges returned by a specified expression that are overlapped by the range of the following expression.

Syntax:

{expression} NOOVERLAP {expression}

where:

expression Specifies a valid IML expression

Example:**Specify**

DOC(<cat>) WITHOUT SENT(<hat>)

To return

Documents that contain the concept (synonyms of) `cat`, excluding sentences that contain the concept `hat`

Note: This example may return multiple matches within a single document.

Keywords

Keywords perform specific matching functions. You can use keywords to limit matching for an expression to the specified characteristic. For example, you can specify keywords to represent any single word, or to match an expression only if the matching offset is the first word in a document.

You specify keywords inline within the expression that they apply to.

The following keywords are valid in IML:

- **WORD**, which matches any, but exactly one, token, as described in “WORD Keyword” on page 17.
- **BEGIN**, which matches before the first word in a document, as described in “BEGIN Keyword” on page 18.
- **END**, which matches after the last word in a document, as described in “END Keyword” on page 18.
- **THIS**, which assigns a concept sense to one or more tokens in IML expressions within the Dictionary, as described in “THIS Keyword” on page 19.

WORD Keyword

The WORD keyword matches any, and exactly one word.

Syntax:

[expression] WORD [expression]

where:

expression Specifies a valid IML expression

Example:

Specify	<code>this WORD house</code>
To match	Any single word within a matched expression, for example: <code>this old house</code> <code>this red house</code>
And not match	<code>this big old house</code> <code>this house</code>

Note: You can modify the WORD keyword to match multiple words using number expressions, as described in “Number Expressions” on page 19.

BEGIN Keyword

The BEGIN keyword specifies the beginning of a document, prior to the first word. Use the BEGIN keyword to limit matching for an expression to the first word in a document.

Syntax:

BEGIN {expression}

where:

BEGIN	Specifies to match immediately before the first word in a document
expression	Specifies any valid IML expression

Example:

Specify	<code>DOC (BEGIN <cat>)</code>
To match	Documents having the concept (synonyms of) <code>cat</code> as the first word in the body of the document

END Keyword

The END keyword specifies the end of a document, after the last word. Use the END keyword to limit matching for an expression to the last word in a document.

Syntax:

END expression

where:

END	Specifies to match immediately after the last word in a document
expression	Specifies any valid IML expression

Example:

Specify	DOC (END <cat>)
To match	Documents having the concept (synonyms of) <code>cat</code> as the last word in the body of the document

THIS Keyword

The THIS keyword is valid only in IML expressions within concept definitions in the Dictionary. The THIS keyword specifies a part of an IML expression that represents the defined concept. You can use THIS to limit the part of expression that the Rules Engine will use as the concept in subsequent operations.

Syntax:

expression=THIS

where:

THIS	Specifies the portion of the expression to use as the concept in subsequent operations
expression	Specifies any valid IML expression that defines the concept

Example:

Specify	(online OR virtual) NEAR_5 banking=THIS
To define	A concept <online banking>
That matches	Portions of text like: banking online is fun and easy... try banking the virtual way with our...
And specifies that	The Rules Engine will use the word <code>banking</code> in subsequent operations on this concept

Number Expressions

Number expressions specify a number or range of occurrences to match for the expression they apply to. You can use number expressions to apply numeric ranges to any valid IML expressions.

For example, you can specify to match one or more occurrences of an expression, or up to five occurrences of a specified expression.

The following number expressions are valid in IML:

- Simple range number expressions, as described in “(...)Simple Range” on page 20
- Ascending range number expressions, as described in “(...) Ascending Range” on page 21
- Descending range number expressions, as described in “(...) Descending Range” on page 21

General Rules for Specifying Number Expressions

You specify number expressions as a single range of integers separated by a hyphen and enclosed within parentheses. Number expressions follow the expression they apply to.

Syntax:

expression(number_expression)

where:

expression	Specifies a valid IML expression
number_expression	Specifies a valid number expression of the following type: <ul style="list-style-type: none"> • “(...)Simple Range” on page 20 • “(...) Ascending Range” on page 21 • “(...) Descending Range” on page 21

(...-...)Simple Range

The simple range number expression specifies a range that spans the specified lower and upper boundaries.

Syntax:

expression(n-m)

where:

n	Specifies the lower limit of the range
m	Specifies the upper limit of the range. The value of m must be greater than the value of n
expression	Specifies any valid IML expression

Example:

Specify	<hat>(2-3)
To match	Occurrences of the concept (synonyms of) <code>hat</code> in a series of two or three: hat hat hat hat hat
And not match	Single occurrences of the term <code>hat</code> , or a series of four or more <code>hats</code>

Note: In the match example, the Rules Engine would produce a total of four matches:

- a match for the series of two `hats` on the first line: {hat hat}
- a match for the first series of two `hats` on the second line: {hat hat} hat
- a match for the second series of two `hats` on the second line: hat {hat hat}
- a match for the series of three `hats` on the first line: {hat hat hat}

(...-) Ascending Range

The ascending range number expression specifies all integers greater than or equal to the specified lower boundary.

Syntax:

expression (n-) expression

where:

n	Specifies the lower limit of the range
expression	Specifies any valid IML expression

Example:

Specify cat WORD(2-) hat

To match Occurrences of the specified expressions `cat` and `hat` having intervening words within the specified range or two or more:

cat and the hat
cat and the red hat

And not match Occurrences of the specified expressions `cat` and `hat` having intervening words beyond the specified range or two or more:

cat and hat

(-...) Descending Range

The descending range number expression specifies all integers less or equal to than the specified upper boundary, including 0.

Syntax:

expression(-n)

where:

n	Specifies the upper limit of the range
expression	Specifies any valid IML expression

Example:

Specify	cat WORD(-2) hat
To match	Occurrences of the specified expressions <code>cat</code> and <code>hat</code> having intervening words within the specified range or two or fewer: cat hat cat and hat cat and the hat
And not match	Occurrences of the specified expressions <code>cat</code> and <code>hat</code> having intervening words beyond the specified range or two or fewer: cat and the red hat

+ * Macros

Macros are assigned character substitutions for commonly specified IML expressions. You can use macros to specify 0 or more occurrences of any word, and 1 or more occurrences of any word. The following macros are defined in IML:

- * Specifies 0 or more occurrences of a word. See “Zero or More Words Macro” on page 22
 - + Specifies 1 or more occurrences of an expression. See “One or More Words Macro” on page 22
- You specify macros inline within IML expressions, in the form:
- ```
{expression}macro{expression}
```

**Zero or More Words Macro**

You can specify the macro `*` to match occurrences of zero or more words, in the following form:

```
{expression}*{expression}
```

where:

- \* Matches occurrences of zero or more words
- `expression` Specifies any valid IML expression

**Note:** The `*` macro can be expressed in IML as the following keyword and number expression: `WORD(0-)`

**One or More Words Macro**

You can specify the macro `+` to match occurrences of one or more words, in the following form:

```
{expression}+{expression}
```

where:

- + Matches occurrences of one or more words
- `expression` Specifies any valid IML expression

**Note:** The `+` macro can be expressed in IML as the following keyword and number expression: `WORD(1-)`

## IML Variables

A variable is a symbol that represents a contiguous set of words in a user request. Variables are a method of associating a part of the user request with an expanded (more general) or reduced (more specific) set of meanings.

There are local and global variables. Local variables apply only within the Rule in which they are specified. Global variables apply within the Rule in which they are set, and also within subsequent Rules.

The Rules Engine processes variables during request processing. When the Rules Engine evaluates a Rule as true, it sets any variables specified within the Rule. Once a variable is set, its value is substituted when it is referenced from another expression using a Variable Instantiation Language (VIL) expression. Local variables can be referenced only by expressions within the same Rule (but not from within the expression in which they are set). Global variables can be referenced by any subsequent Rules.

**Note:** You cannot refer to a global variable in a Rule that precedes the Rule in which it is set. The Dictionary Manager automatically checks global variables for validity when you update Dictionary data, and will issue a warning if this occurs.

You use variables by:

- Specifying them within IML expressions, as described in “==VARIABLE, =#VARIABLE Specifying Variables” on page 23
- Assigning their values, as described in “Assigning Values to Variables” on page 24
- Referring to them, as described in “Referring to Variables” on page 24

### =VARIABLE, =#VARIABLE Specifying Variables

You specify a variable within an IML expression in the format:  
(expression)=variable

or

(expression)=#variable

where:

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #        | Specifies a global variable, which applies to all subsequent rules. Omitting the # prefix specifies a local variable, which applies only to the current rule.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| variable | Can be any alphanumeric string. The first character in the string must be a letter (alpha) character. Letter characters can be upper and lower case.<br><br>If you specify only upper case characters, you can also use the – (hyphen) character.<br><br>Global variables can also include the characters: <ul style="list-style-type: none"> <li>• _ (underscore)</li> <li>• – (hyphen)</li> <li>• \$</li> <li>• %</li> </ul> You can specify the same string for multiple variables. If you specify the same string for multiple global variables, the Rules Engine adds each assignment as it is processed. |

**Local Variable Example:**

(man OR guy OR male)=A

**Global Variable Example:**

(man OR guy OR male)=#male

**Assigning Values to Variables**

You assign the value of a variable using Variable Instantiation Language (VIL) functions. When you set a variable within an IML expression, you use various VIL functions to *instantiate*, or set its value in the context of an individual user request. You specify these functions using VIL expressions, usually within a Rule action. VIL expressions contain one or more function calls, and each function call has one or more optional parameters, as described in “VIL Syntax” on page 26.

**Referring to Variables**

You can include VIL expressions to refer to variables from within index queries, custom content, SQL queries, or other expressions. You specify references to variables within curly brackets { }, in the form:

{ VIL\_expression }

where { } delimits VIL expressions within surrounding text such as IML expressions or custom content.

**Example:**

You can use VIL expressions to refer to variables from within custom content specified in the answer section of a Rule:

You can buy a {VIL\_expression\_1} today for {VIL\_expression\_2}.

where:

|                  |                                                                                                                                                                                |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VIL_expression_1 | Refers to a variable set in a Rule condition that resolves to a product name or type of product mentioned in a user request that matched a <code>price of product</code> Rule. |
| VIL_expression_2 | Refers to a variable instantiated from a database query for the price of the product mentioned in the user request.                                                            |

The instantiated statement displayed by the User Interface might be:

You can buy the *Model 500 washer/dryer* today for \$900.

You can also specify a variable to resolve to a valid IML expression, which the Rules Engine then evaluates as an action.

**/\*...\*/ Comments**

You can include comments within IML expressions. Comments are words or phrases, usually explanatory, that are present in the IML expression, but which are ignored by the Rules Engine. Comments are useful to provide inline explanation of some aspect of the IML function, and can also be used to isolate a portion of an expression for testing purposes.

You specify comments using special character strings as delimiters to define the beginning and end of the comment.

**Syntax:**

```
/* comment */
```

where:

|                      |                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------|
| <code>/*</code>      | Specifies the beginning of the comment                                                      |
| <code>comment</code> | Specifies the comment, which can be any characters that you want the Rules Engine to ignore |
| <code>*/</code>      | Specifies the end of the comment                                                            |

**Example:**

|                        |                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------|
| <b>Specify</b>         | SENT(<cat>,<hat>)/ <b>*</b> matches sentences that contain either cat or hat <b>*</b> / |
| <b>To add</b>          | An explanation to the IML expression                                                    |
| <b>And ensure that</b> | The Rules Engine processes only the IML expression SENT (<cat> , <hat>)                 |

## The Variable Instantiation Language (VIL)

Oracle Knowledge uses a special language, called the Variable Instantiation Language (VIL) to resolve, or *instantiate*, variables set within Rules. The Rules Engine uses VIL to generate and manipulate strings that ultimately determine values for variables.

You use VIL by specifying expressions within Rule conditions and actions. Within conditions, you can use VIL expressions to describe IML conditions based on request content. Within actions, you can specify VIL expressions within search components, custom content, or other text fields.

You specify VIL expressions in the form described in “VIL Syntax” on page 26. The Rules Engine processes VIL expressions, as described in “VIL Function Processing” on page 26.

## VIL Syntax

The Variable Instantiation Language consists of functions, parameters, operators, and delimiters that you combine to create valid VIL expressions.

You specify VIL expressions in the form:

```
{variable}{operator}function([parameter=value, parameter=value, ...]){operator}function(...)
```

where:

|           |                                                                                                                      |
|-----------|----------------------------------------------------------------------------------------------------------------------|
| variable  | Is an optional variable passed to the function for instantiation                                                     |
| operator  | Is a valid VIL operator, as described in “->    VIL Operators and Delimiters” on page 28                             |
| function  | Is a valid VIL function, as described in “VIL Functions” on page 30                                                  |
| parameter | Is a valid parameter of the function. Parameters are described within the function descriptions to which they apply. |
| value     | Is a specified value of the parameter                                                                                |

## VIL Function Processing

VIL functions take information as input, and pass information as output. They can also refer to various services and data. Input is in the form of sets of strings, which are associated with words in user requests, as described in “VIL Function Input” on page 26.

Most VIL functions manipulate input according to specified parameters before passing them as output.

The Rules Engine generally applies functions to the input strings in sequence; however, it sometimes applies functions only to some strings, or to a combination of strings, depending on the functions and parameters that are specified.

VIL functions can refer to any of the strings in any of the input sets (corresponding to any word in the question) as they calculate their output.

## VIL Function Input

The input to VIL functions is a set. Each input set refers to a wordform in the user request. The input set is composed of subsets, and the subsets are sets of strings.

The literal string contains disambiguation information for the wordform occurring in the user request. For each disambiguated wordform, the set of strings will be a single string, which is a normalized form (token) of the word, as determined by the Language Analyzer.

For example, consider a user request:

What does a hot dog cost?

and a Rule that assigns a variable `A` to the portion of the request `hot dog cost`.

The string-set associated with the words `hot dog` would contain a single string, `hot dog`. The string-set associated with the word `cost` would contain a single string, `cost`.

If, for the purpose of this example, the Rules Engine sends these strings to the following `MORPH` function, which generates morphological variants, as described in “MORPH The Morphology Function” on page 34:

`A-> MORPH(FORMS=OP)`

the `MORPH` function will generate the strings in their original forms (O) and in their plural form (P), resulting in the string sets:

hot dog  
hot dogs

and

cost  
costs

**Note:** The strings in these sets are always wordforms, and always occur in the Ontology, even if as the `unknown` wordform.

## VIL Function Output

VIL function output is a set of sets of strings, where each of the higher order of sets corresponds to a wordform in the user request, except for the output of the `STRING` function.

The output of the `STRING` function is a single string that concatenates all of its input strings. The `STRING` function is always the last function in a VIL expression, either as an implied function, using the default values, or using explicitly specified values. See “`STRING` The String Function” on page 37 for more information.

## Combining VIL Functions

You can specify multiple functions within a VIL expression. The Rules Engine performs the specified functions serially, in the order that it reads them, using the output from the preceding function as the input for the next.

Input and output strings may not always apply to the specified functions in a VIL expression.

**Note:** A non-applicable string is different than an applicable string that produces a null output. See “Non-Applicable and Null Output Strings” on page 28 for an explanation of the implications of this difference.

If a function receives a non-applicable input string, it will either pass that string, unprocessed, as input to the next function, or not, depending on the specified operator. Operators specify the ways in which function outputs will be used as input by subsequent functions, as described in “`-> ||` VIL Operators and Delimiters” on page 28.

You can specify any number of VIL functions and operators in any order, except the `STRING` function. The `STRING` function must be the last specified function in a VIL expression. The Rules Engine assumes the `STRING` function's default values unless you explicitly specify the `STRING` function within a VIL expression.

## -> || VIL Operators and Delimiters

VIL uses the following operators to specify how the Rules Engine will pass data between specified functions.

- > Specifies to pass function output as input to a subsequent function. For example:
- ```
function_1(parameter) -> function_2(parameter)
```
- Specifies that the Rules Engine will send the output of `function_1` as input to `function_2`.
- || Specifies to pass function output as input to a subsequent function that will act on the input only if it is null. For example:
- ```
function_1||function_2
```
- Specifies that the Rules Engine will pass the output to `function_2`, and that `function_2` will act on the input only if it is null.

## Non-Applicable and Null Output Strings

In VIL processing, there is an important difference between strings that do not apply to functions and applicable strings that return null values. The Rules Engine passes non-applicable strings to the next specified function, depending on the type intervening operator. The operators within VIL functions process strings that return null values differently than non-applicable strings, as described in the following table:

| If a string...       | And the operator is... | The Rules Engine...                                                                                                                 |
|----------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| does not apply       | -> or                  | passes the string directly to the next function                                                                                     |
| returns a null value | ->                     | passes the string resulting from the function (null) to the next function                                                           |
| returns a null value |                        | passes no string to the next function and uses the latter function on the input that returned a null value for the earlier function |

For example, the function:

```
ALIAS(LIST="skipwords")
```

specifies that every string will be compared to a list of skipwords. The skipwords list refers to a data table that specifies a replacement string value of no-output.

If the next function is specified with the || combining operator, as follows:

```
ALIAS(LIST="skipwords") || function_2(parameter)
```

then:

- Strings that have no entry in the skipwords data table will be sent to `function_2`
- Strings that appeared in the skipwords table, and therefore produced no output will not be sent to `function_2`



## VIL Parameters

You can specify parameters to control the behavior of VIL functions. Each parameter has a set or range of valid values.

For example, the STRING function has the following parameters that you can use to add additional contents to the string that is passed as input:

- BEGIN
- END
- SEP

Each of the parameters accepts a string as its value, so that if you specify:

```
cat hat -> STRING(BEGIN=">>> ", END=" <<<", SEP=" --- ")
```

The Rules Engine will produce the string:

```
>>> cat --- hat <<<
```

## VIL Functions

You specify VIL functions within VIL expressions, along with the various parameters and operators that control how the Rules Engine processes the functions and passes data between them. The available VIL functions are:

- “ALIAS The Alias Function” on page 30
- “INHERIT The Inherit Function” on page 31
- “MORPH The Morphology Function” on page 34
- “NOVAR The Novar Function” on page 34
- “ONTOLOGY The Ontology Function” on page 35
- “REPLACE The Replace Function” on page 37
- “STRING The String Function” on page 37
- “TEXT The Text Function” on page 38
- “USERDATA The User Data Function” on page 44
- “DATE The Date Function” on page 45

### ALIAS The Alias Function

The ALIAS function replaces strings based on configured Alias Lists that are stored in the Dictionary. Alias Lists enable transformations, such as conversion of text strings to corresponding database values to support SQL queries. For more information on Alias Lists, see “Intelligent Search Optimization Guide”.

#### **Syntax:**

```
ALIAS(LIST="list_name",[CASESENSITIVE=value])
```

where:

|               |                                                                                                                                                                                            |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LIST          | Specifies the name of the list, as defined in the Dictionary, enclosed in double quotes. There is no default value.                                                                        |
| CASESENSITIVE | Specifies that the Rules Engine will perform transformations only when capitalization of terms matches. This parameter is optional. The default is <code>FALSE</code> .                    |
| KEYOUTONLY    | Copies the list of keys in the alias list. (Intended for the query side to be used in rule conditions to provide a match.) This parameter is optional. The default is <code>FALSE</code> . |

**Example:**

The following expression:

```
ALIAS(LIST="skipwords")
```

specifies that every input string will be compared to the entries in the skipwords alias list for processing.

**Example:**

Consider a Rule that assigns the variable `A` to the word `Accounting`:

```
Accounting=A
```

and an Alias List named `PROGRAMS` that specifies the alias entry:

```
"Accounting", "ACCT"
```

If a VIL function call within a Rule action specifies:

```
A->ALIAS(LIST="PROGRAMS")
```

the Rules Engine uses the VIL functions to transform the value of the variable `A` to the value `ACCT`.

**Example:**

The following expression:

```
{A->ALIAS(LIST="US state abbreviation", KEYOUTONLY=TRUE)} and "alabama"=A
```

produces:

```
<noun.location.nevada> <noun.location.oregon> <noun.location.nebraska>
<noun.location.wyoming> <noun.location.connecticut>, etc
```

## INHERIT The Inherit Function

The `INHERIT` function specifies inheritance criteria for Search Components. See “Intelligent Search Optimization Guide” for more information on Search Components and how they are assigned. The `INHERIT` function creates a string containing all assigned Search Components.

**Syntax:**

INHERIT(TYPE=value,SUBTYPE=value,[SCORE=number],[SEP=string],[EXACT=value],[NODUPS=value])

where:

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE    | <p>specifies the required type of search components to be inherited. Possible values are:</p> <p><b>Index</b><br/>Index Search Components use IML expressions to define criteria for searching the indexes of unstructured content in the Content Store.</p> <p><b>SQL</b><br/>SQL Search Components use SQL queries to define criteria for retrieving information from configured structured data sources.</p> <p>The default value is <code>ALL</code>. See “Intelligent Search Optimization Guide” for more information.</p> |
| SUBTYPE | <p>Specifies a Search Component subtype to be inherited. The default value is <code>ALL</code>. See “Intelligent Search Optimization Guide” for more information.</p>                                                                                                                                                                                                                                                                                                                                                           |
| SCORE   | <p>Specifies the allowed score range of search component levels to be inherited. The default value is <code>0</code>.</p>                                                                                                                                                                                                                                                                                                                                                                                                       |
| SEP     | <p>Specifies an optional separator string to insert between output strings. This parameter is optional. The default value is null (<code>""</code>).</p>                                                                                                                                                                                                                                                                                                                                                                        |
| EXACT   | <p>Specifies whether Search Components are inherited only if the variable range is also the exact range over which the Search Component is assigned. See “Intelligent Search Optimization Guide” for information on search components ranges.</p> <p>Valid values are <code>true</code> and <code>false</code>. <code>True</code> specifies that the variable range and the search component range must match exactly. The default value is <code>FALSE</code>.</p>                                                             |
| NODUPS  | <p>Specifies whether identical search component levels will be inherited more than once. The default value is <code>FALSE</code>.</p>                                                                                                                                                                                                                                                                                                                                                                                           |

**Example:**

A->INHERIT(SCORE="20")

creates a string consisting of all search components already assigned to A, and having a score of 20.

**Note:** The Evaluator translates importance and quality values into absolute scores associated with each entry in a Search Component. See “Intelligent Search Optimization Guide” for more information.

When the Search Component covers only one string set, the inherited Search Component uses exactly that string set.

In cases where the Search Component covers more than one string set, the string sets are combined, separated by the value of the SEP argument.

**Example:**

Consider a query:

`april shower`

that has a variable A assigned to it, and that a search component is assigned to the portion "april":

`(apr OR april)`

with a score of 10.

Consider the VIL expression:

`{{april} {shower}} -> INHERIT(SCORE=10) || MORPH(FORMS="O")`

which produces the string:

`(apr OR april) shower`

If the original string has an additional search component assigned to the portion `april shower`:

`(rain)`

that has a score of 10 :

`{{april} {shower}} -> INHERIT(SCORE=10) || MORPH(FORMS="O") => {{(rain)} {}}`

**Example:**

Consider a Rule that assigns the search component variable A to the word `Accounting`:

`Accounting=A`

and the corresponding standard index search components:

`1000 ("Accounting") IS (<verb.possession:account>`

`1000 <noun.possession:account2>`

`1000 <noun.state:account>`

If a VIL function call within a Rule action specifies:

`A-> INHERIT( EXACT=TRUE,SCORE=1000,SEP = ") OR (",TYPE = "index",SUBTYPE = "standard" )`

The Rules Engine uses the VIL functions to transform the value of the variable A to:

`((("Accounting") IS (<verb.possession:account> OR <noun.possession:account2> OR <noun.state:account>))`

## MORPH The Morphology Function

The MORPH function creates specific morphological inflections of wordforms. The MORPH function can create the following forms:

**B** generates base (stem) wordforms

**Note:** If the MORPH function is not called, the Rules Engine uses the stem of each wordform, as determined by the Language Analyzer.

### Syntax:

MORH([FORMS="|B|\*",[SEP=<string>])

where:

|       |                                                                                                                                      |
|-------|--------------------------------------------------------------------------------------------------------------------------------------|
| FORMS | Specifies one or more of the valid morphological forms. The default is O, which generates the original wordform used in the request. |
| SEP   | Specifies an optional separator string to insert between output strings. This parameter is optional. The default value is OR.        |

### Example:

Consider a Rule that assigns the search component variable A to the word `Accounting`:

A="Accounting"

and a VIL function call within a Rule action to generate the infinitive and plural forms of the stem word:

A->MORPH(FORMS="IP")

The Rules Engine processes the MORPH function and generates:

account OR accounts

## NOVAR The Novar Function

NOVAR is a special function designed to handle cases in which there is no match for a variable. You specify the NOVAR function in the form:

NOVAR([ACTION="DROP" | <string>])

where:

|        |                                                                                                                                                                                                               |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACTION | Specifies the action to perform. Valid values are a specified string to use as output, and DROP, which specifies to stop processing and discard this expression. The default is to output a null string (""). |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Example:

Consider an IML expression to match a user name or account ID:

(<username>=username OR <account\_id>)

and a request that contains an account ID. The username variable will be instantiated using the NOVAR function,

username -> NOVAR(ACTION="Valued Customer")

which generates the string `Valued Customer`.

## ONTOLOGY The Ontology Function

The ONTOLOGY function generates Ontology entities by traversing the Ontology hierarchy using a starting point defined by the input, and a direction and distance defined by the ONTOLOGY function parameters.

### Syntax:

ONTOLOGY([EXACT=value],[CONTAINED=value],[TRAVERSAL=value],[SEP=<string>])

where:

|           |                                                                                                                                                                                                                        |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EXACT     | Specifies to use only concepts that encompass the exact range of tokens as the instantiated variable; the concept is therefore an exact match for the variable. Valid values are TRUE and FALSE. The default is FALSE. |
| CONTAINED | Specifies to use concepts that are contained within the range of tokens that make up the instantiated variable, for example a variable consisting of four tokens where tokens 2 and 3 denote a concept.                |
| TRAVERSAL | Specifies the option that determines the direction and distance that the function will travel to generate output. See "Ontology Traversal Functions" on page 36 for valid traversal options.                           |
| SEP       | Specifies an optional separator string to insert between output strings. This parameter is optional. The default value is null ("").                                                                                   |

### Example:

Consider a Rule that assigns a variable A with a value Account.

A="Account"

and a VIL function call within a Rule action to generate the immediate parent noun concepts:

A->ONTOLOGY(EXACT=TRUE,CONTAINED=TRUE,TRAVERSAL="isaUpOneNoun",SEP=" OR " )

The Rules Engine uses the ONTOLOGY function to locate the specified Ontology relations and generate the parent concepts for Account:

(<noun.communication:statement1> OR <noun.state:account>)

## Ontology Traversal Functions

The Ontology traversal functions travel a specified number of links of a specified type within the Ontology hierarchy.

The Ontology traversal functions take a set of string-sets (wordforms) as input, locate the relevant link type for the specified function, and return the set of wordforms associated with the specified traversal options.

| Option                    | Description                                                                                                                                          |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>isaDnAllNoun</b>       | This option takes concepts as input and returns all child noun concepts that descend from the input concept.                                         |
| <b>isaSynDnAllNoun</b>    | This option takes concepts as input and returns the noun synonyms of all of their children.                                                          |
| <b>isaDnAllVerb</b>       | This option takes concepts as input and returns all child verb concepts that descend from the input concept.                                         |
| <b>isaSynDnAllVerb</b>    | This option takes concepts as input and returns the verb synonyms of all of their children as a set of stem words.                                   |
| <b>isaUpOneNoun</b>       | This option takes concepts as input and returns the immediate parent noun concepts.                                                                  |
| <b>isaSynUpOneNoun</b>    | This option takes concepts as input and returns the immediate parent noun concepts as sets of stem words.                                            |
| <b>isaDnOneNoun</b>       | This option takes concepts as input and returns the immediate child noun concepts.                                                                   |
| <b>isaDnTwoNoun</b>       | This option takes concepts as input and returns the two levels of child noun concepts.                                                               |
| <b>isaSynDnOneNoun</b>    | This option takes concepts as input and returns the immediate child noun concepts as sets of stem words.                                             |
| <b>isaSynDerDnAllNoun</b> | This option takes concepts as input and returns the noun synonyms of all of their children as a set of stem words.                                   |
| <b>attrUpOneAdj</b>       | This option takes concepts as input and returns the immediate parent adjective concepts, for example, <i>hot</i> -> <i>temperature</i> .             |
| <b>attrSynUpOneAdj</b>    | This option takes concepts as input and returns the immediate parent adjective concepts as a set of stem words.                                      |
| <b>attrUpOneNoun</b>      | This option takes concepts as input and returns the immediate parent noun concepts.                                                                  |
| <b>partofUpOneNoun</b>    | This option takes concepts as input and returns the immediate <i>part-of</i> parent noun concepts.                                                   |
| <b>partofSynUpOneNoun</b> | This option takes concepts as input and returns the immediate <i>part-of</i> parent noun concepts as sets of stem words.                             |
| <b>partofSynDnAllNoun</b> | This option takes concepts as input and returns the noun synonyms of all descendant concepts having <i>part-of</i> relations as a set of stem words. |
| <b>partofDnAllNoun</b>    | This option takes concepts as input and returns all of the descendant concepts having <i>part-of</i> relations.                                      |



## REPLACE The Replace Function

The REPLACE function replaces a specified string or a substring with a specified replacement string based on a specified pattern match.

The REPLACE function operates on single tokens; you can use REPLACE to match a multi-word string only if the words have been combined into a single token by a previous VIL operation.

### Syntax:

You specify the REPLACE function in the form:

```
REPLACE(FIND=<string>,REPLACE=<string>,CASESENSITIVE=value,CONTAINS=value)
```

where:

|               |                                                                                                                                                             |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FIND          | Specifies the string or substring to match. This is a required parameter. The default is "".                                                                |
| REPLACE       | Specifies a replacement string for the matched string or substring. This is a required parameter. The default is "".                                        |
| CASESENSITIVE | Specifies whether the Rules Engine will match strings only if upper- and lowercase characters match. Valid values are TRUE and FALSE. The default is FALSE. |
| CONTAINS      | Specifies whether to match a substring of the input string. Valid values are TRUE and FALSE. The default is FALSE.                                          |

### Example:

Consider a rule that assigns the variable A to the string Account.

```
(Account)=A
```

and a VIL function call within a rule action to replace strings containing the substring Acc with the string ACCT:

```
A->REPLACE(FIND="cc" REPLACE="CCT" CONTAINS=TRUE)
```

The Rules Engine uses the REPLACE function to produce:

```
ACCT
```

## STRING The String Function

The STRING function concatenates a set of input strings to create a single string. You can also specify parameters to:

- add strings to the beginning of the input strings
- add strings to the end of the input strings
- separate sets of input strings
- remove redundant strings from the final concatenated string

The STRING function is implied in any VIL expression. You do not need to specify the STRING function unless you want to use parameters other than the defaults.

You specify the STRING function in the following form:

```
STRING(BEGIN="string" | SEP="string" | END="string" | NODUPS=value | LOWERCASE=value |
ALWAYSUFFIX=value, |ESCAPE=<string>)
```

where:

|             |                                                                                                                                                                                                                                         |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BEGIN       | Specifies to insert a specified string at the beginning of each substring in the concatenated string. The default value is " (".                                                                                                        |
| SEP         | Specifies an optional separator string to insert between output strings. This parameter is optional. The default value is "".                                                                                                           |
| END         | Specifies to insert a specified string at the end of each substring in the concatenated string. The default value is ") "                                                                                                               |
| NODUPS      | Specifies whether to remove redundant strings within the concatenated string. Valid values are TRUE, which specifies to remove redundant strings, and FALSE, which specifies to preserve redundant strings. The default value is FALSE. |
| LOWERCASE   | Specifies to transform the output string to lowercase characters. Valid values are TRUE and FALSE. The default is FALSE.                                                                                                                |
| ALWAYSUFFIX | Specifies whether the Rules Engine will add the specified BEGIN and END values to null strings. Valid values are TRUE and FALSE. The default is FALSE.                                                                                  |
| ESCAPE      | Specifies a character for escape processing, so that characters immediately following the ESCAPE character will be processed as literal strings, not as syntax elements.                                                                |

### Example:

Consider a Rule that assigns the variable A to the string `cat dog`.  
`(cat dog)=A`

and a VIL function call within a Rule action to add the specified elements to the input string:  
`A->STRING(BEGIN=">>>", END="<<<", SEP="---")`

The Rules Engine uses the STRING function to produce:  
`>>> cat --- dog <<<`

## TEXT The Text Function

The TEXT function performs text editing operations on the input string according to specified parameters.

### Syntax:

You specify the TEXT function in the form:

`TEXT([ARG1=<string>],[ARG2=<string>},{OPERATION=operator})`

where:

|      |                                                   |
|------|---------------------------------------------------|
| ARG1 | Specifies an argument to the specified operation. |
| ARG2 | Specifies an argument to the specified operation. |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OPERATION | Specifies one of the following operations: <ul style="list-style-type: none"> <li>• “The Capitalize Operation” on page 39</li> <li>• “The Concatenate Operation” on page 40</li> <li>• “The Count Operation” on page 40</li> <li>• “The Lowercase Operation” on page 41</li> <li>• “The Replace Character Operation” on page 41</li> <li>• “The Sort Operation” on page 42</li> <li>• “The Tokenize Operation” on page 42</li> <li>• “The Trim Operation” on page 43</li> <li>• “The Unique Operation” on page 43</li> <li>• “The Uppercase Operation” on page 44</li> </ul> |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Example:

Consider a Rule that sets the variable `A` to the string:

```
"This is an Account"=A
```

and a VIL function call within a Rule action to replace the matching substring `i` with the specified string `I`:

```
A->TEXT(ARG1="i", ARG2="I", OPERATION="replacechar")
```

The Rules Engine uses the TEXT function to edit the input string and produce:

```
This Is an Account
```

## The Capitalize Operation

The Capitalize operation of the TEXT function capitalizes (transforms the initial character to uppercase) specified characters within the input string.

### Syntax:

You specify the Capitalize operation in the form:

```
TEXT([delimiter="delimiter"],OPERATION="capitalize")
```

where:

| Argument         | Description                                                                                                                                                                                                                                                                                                                                           |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>delimiter</b> | Specifies one or more characters to delimit capitalization. The default is the set of non-alphanumeric characters (for example, <code>~!@#\$%^&amp;*()_+=[]\{} ;':",./&lt;&gt;?)</code> .<br><br>The Capitalize operation capitalizes the character immediately following the delimiters, and preserves the delimiter character in the result string. |

**Examples:**

**Specify:** `TEXT(OPERATION="capitalize")`

**To process the input:** `this is the answer`

**And return the value:** `This Is The Answer`

**Specify:** `TEXT(delimiter="T",OPERATION="capitalize")`

**To process the input:** `this is the answer`

**And return the value:** `tHis is tHe answer`

**The Concatenate Operation**

The Concatenate (`concat`) operation of the TEXT function adds specified strings as prefixes or suffixes to each word in the input string. The Concatenate operation has the following arguments:

| Argument    | Description                                                       |
|-------------|-------------------------------------------------------------------|
| <b>ARG1</b> | specifies a prefix string to add to each word in the input string |
| <b>ARG2</b> | specifies a suffix string to add to each word in the input string |

**Example:**

`TEXT(ARG1="PREFIX", ARG2="SUFFIX", OPERATION="concat")`

**Input String:**

`This is the Answer`

**Result:**

`PREFIXThisSUFFIX PREFIXisSUFFIX PREFIXtheSUFFIX PREFIXAnswerSUFFIX`

**The Count Operation**

The Count operation of the TEXT function transforms the input string to an integer corresponding to the number of tokens (words) in the string. The Count operation has no arguments.

**Example:**

`TEXT(OPERATION="count")`

**Input String:**

`This is the Answer`

**Result:**

`4`

## The Lowercase Operation

The Lowercase operation of the TEXT function transforms specified characters within the input string to lowercase.

### Syntax:

You specify the Lowercase operation in the form:

```
TEXT([delimiter="delimiter"],OPERATION="lowercase")
```

where:

| Argument         | Description                                                                                                                                                                                                                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>delimiter</b> | Specifies a character or string within the input to transform to lowercase. The default is the set of non-alphanumeric characters (for example, ~!@#\$%^&*()_+=[]\{ ;':",./<>?).<br><br>The Lowercase operation transforms the character immediately following the specified delimiters, and preserves the delimiter character in the result string. |

### Example:

**Specify:** TEXT(OPERATION="lowercase")

**To process the input:** This is the Answer

**And return the value:** this is the answer

**Specify:** TEXT(delimiter="T",OPERATION="lowercase")

**To process the input:** THIS IS THE ANSWER

**And return the value:** ThIS IS ThE ANSWER

## The Replace Character Operation

The Replace Character (`replacechar`) operation of the TEXT function replaces a character specified as the initial argument with an alternate specified as the second argument. The Replace Character operation has the following arguments:

| Argument    | Description                                                   |
|-------------|---------------------------------------------------------------|
| <b>ARG1</b> | specifies the character to replace within the input string    |
| <b>ARG2</b> | specifies a character to replace the specified character with |

### Example:

```
TEXT(ARG1="s", ARG2="t", OPERATION="replacechar")
```

### Input String:

This is the Answer

### Result:

Thit it the Antwer

## The Sort Operation

The Sort operation of the TEXT function sorts the tokens (words) within the input string in alphabetical order. The Sort operation has the following arguments:

| Argument    | Description                                                                                                                                                                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ARG1</b> | <code>true</code> specifies case-sensitive sorting. <code>false</code> specifies case-insensitive sorting. <code>false</code> is the default. Case-sensitive sorting is conducted according to ASCII sort standards (uppercase letters precede lowercase letters). |
| <b>ARG2</b> | <code>reverse</code> specifies reverse (z-a) sorting. <code>normal</code> (or any value other than <code>reverse</code> ) specifies a-z sorting.                                                                                                                   |

### Example:

```
TEXT(OPERATION="sort")
```

### Input String:

```
This is the Answer
```

### Result:

```
Answer is the This
```

### Example:

```
text(ARG1="true", OPERATION="sort")
```

### Input String:

```
This is the Answer
```

### Result:

```
Answer This is the
```

## The Tokenize Operation

The Tokenize TEXT operation transforms an input string into separate words, or tokens. You can use the Tokenize operation to break single entities into their constituent parts. For example, the Tokenize operation can separate a single multiword value (InQuira Corporation) into separate words (InQuira, Corporation) to enable further processing of the individual words.

### Syntax:

You specify the Tokenize operation in the form:

```
TEXT([delimiter="delimiter"],OPERATION="tokenize")
```

where:

| Argument | Description |
|----------|-------------|
|----------|-------------|

**delimiter** Specifies a character or string within the input to use as a boundary between tokens. The default is the set of non-alphanumeric characters (for example, ~!@#\$%^&\*()\_+=[]\{}|;':",./<>?) which results in token differentiation at any of the default characters.

The tokenization process preserves the delimiter character in the tokenized result.

### **Examples:**

**Specify:** `TEXT(delimiter=".",OPERATION="tokenize")`

**To process the input:** `www.inquiria.com`

**And return the value:** `www . inquiria . com`

**Specify:** `TEXT(OPERATION="tokenize")`

**To process the input:** `The_quick?brown{fox}`

**And return the value:** `The _ quick ? brown { fox }`

## The Trim Operation

The Trim operation of the TEXT function removes white space from before and after the string.

### **Example:**

`TEXT(OPERATION="trim")`

### **Input String:**

`" This is the Answer "`

### **Result:**

`"This is the Answer"`

## The Unique Operation

The Unique operation of the TEXT function removes duplicate tokens (words) within the input string. The Unique operation has no arguments.

### **Example:**

`TEXT(OPERATION="unique")`

### **Input String:**

`This is the the Answer`

### **Result:**

`This is the Answer`

## The Uppercase Operation

The Uppercase operation of the TEXT function transforms the input string to uppercase characters. The Uppercase operation has no arguments.

### **Example:**

```
TEXT(OPERATION="uppercase")
```

### **Input String:**

```
This is the Answer
```

### **Result:**

```
THIS IS THE ANSWER
```

## USERDATA The User Data Function

The USERDATA function returns the value of a configured preference.

### **Syntax:**

You specify the USERDATA function in the form:

```
USERDATA(KEY=<string>)
```

where:

|     |                                                                                                                  |
|-----|------------------------------------------------------------------------------------------------------------------|
| KEY | Specifies the key configured in the application associated with the defined preference. The default key is Date. |
|-----|------------------------------------------------------------------------------------------------------------------|

### **Example:**

Consider a preference that obtains the user's name from a login process:

```
customer_name = Edwin
```

a VIL function call within a Rule action to retrieve that preference value:

```
A->USERDATA(KEY=customer_name)
```

and a managed response that includes the phrase:

```
Thank you for asking, <customer_name>
```

The Rules Engine uses the USERDATA function to transform the variable to the value associated with key `customer_name` in the Preference Service:

```
Thank you for asking, Edwin
```



## DATE The Date Function

The DATE function returns the current date in a specified format, which is used to call `java.text.SimpleDateFormat`.

### Syntax:

You specify the DATE function in the form:

`DATE(FORMAT=...)`

where:

`FORMAT`            The desired date format. The default format is `MMM d, yyyy`.

### Example:

| <i><b>Specifying...:</b></i>                            | <i><b>Results in:</b></i>            |
|---------------------------------------------------------|--------------------------------------|
| <code>DATE (FORMAT=yyyy.MM.dd G 'at' HH:mm:ss z)</code> | 2001.07.04 AD at 12:08:56 PDT        |
| <code>DATE (FORMAT=EEE, MMM d, ''yy)</code>             | Wed, Jul 4, '01                      |
| <code>DATE (FORMAT=h:mm a)</code>                       | 12:08 PM                             |
| <code>DATE (FORMAT=hh 'o''clock' a, zzzz)</code>        | 12 o'clock PM, Pacific Daylight Time |
| <code>DATE (FORMAT=K:mm a, z)</code>                    | 0:08 PM, PDT                         |
| <code>yyyyy.MMMMM.dd GGG hh:mm aaa</code>               | 02001.July.04 AD 12:08 PM            |
| <code>EEE, d MMM yyyy HH:mm:ss Z</code>                 | Wed, 4 Jul 2001 12:08:56 -0700       |







# The General Intent Library Hierarchy

The General Application Intents are intended for use in applications for which no specific industry-based Intent Library exists.

The sections in this guide are arranged to reflect the structure of the General Intent Library Hierarchy. For each Intent, the document includes information on:





- The parents of the Intent
- A description of its purpose
- Recommendations for configuring the Intent, where available
- Any Concept Parameters defined within the standard Intent Library
- A list of standard questions that the Intent should match, where available

The General Application Intent Library contains the following top-level intents and their children:

-  "General Application Product Ordering and Sales Support Intents" on page 46
-  "General Application Account Support Intents" on page 50
-  "General Application Customer Service Inquiry Intents" on page 53
-  "General Application Billing Inquiry and Support Intents" on page 55
-  "General Application General Company Inquiry Intents" on page 59
-  "General Application Website Inquiry Intents" on page 62

## General Application Product Ordering and Sales Support Intents

The following hierarchy contains the General Application Product Ordering and Sales Support intents:

- "Product Ordering and Sales Support" on page 47
  -  "Make Order" on page 47
  -  "Track Order" on page 48
  -  "Product Rebates Inquiry" on page 48
  -  "Warranty Inquiry" on page 49



“Product Insurance Inquiry” on page 49

## Product Ordering and Sales Support

### **Description:**

Matches on questions on the company's product ordering and sales process. This intent is also designed to be default match for support questions on that process that do not have a more specific intent in place.

### **Configuration Recommendations:**

This intent allows the configuration of answers that should be applied to all of the intents. Or, if desired, it can also be used to provide answers based on a specific returned parameterized value.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Make Order

“Product Ordering and Sales Support” on page 47



### **Make Order**

### **Description:**

Matches on questions from customers looking to order products and/or services, whether online or not. Also matches on questions around the process of ordering those products and services.

### **Configuration Recommendations:**

Answers should be content directed at customers who are ready to purchase a product or service. Also consider adding content for supporting the customer through the process of purchasing products and services.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Track Order

“Product Ordering and Sales Support” on page 47



### Track Order

#### **Description:**

Matches on questions from customers looking to find more about the status of their order (including shipping and delivery status).

#### **Configuration Recommendations:**

Answers should be content directed at customers who are ready to purchase a product or service. Also consider adding content for supporting the customer through the process of purchasing products and services.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Product Rebates Inquiry

“Product Ordering and Sales Support” on page 47



### Product Rebates Inquiry

#### **Description:**

Matches on questions from customers looking to find more information on product rebates, including downloading rebate application forms, rebate credits status and rebates available.

#### **Configuration Recommendations:**

Answers should be content directed at customers who are looking to find out how to apply for rebates. Also include content on tracking rebate credits and how to download rebate forms.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Warranty Inquiry

“Product Ordering and Sales Support” on page 47



### Warranty Inquiry

#### **Description:**

Matches on questions from customers looking to find more information on product warranties, including the various warranty offerings available for a product, and how to use the warranty to repair, refund or replace previously purchased product.

#### **Configuration Recommendations:**

Answers should be content directed at customers who are looking to find more information on product warranties, including available offerings, how to make use of them, and the warranty details for a previously purchased product.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Product Insurance Inquiry

“Product Ordering and Sales Support” on page 47



### Product Insurance Inquiry

#### **Description:**

Matches on questions from customers looking to find more information on product insurance, including the various insurance offerings available for a product, and how to use the insurance to repair, refund or replace previously purchased product.

#### **Configuration Recommendations:**

Matches on questions from customers looking to find more information on product insurance, including the various insurance offerings available for a product, and how to use the insurance to repair, refund or replace previously purchased product.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## General Application Account Support Intents

The following hierarchy contains the General Application Account Support Intents:

- “Account Support” on page 50
  - “Update Account Profile” on page 50
  - “Close Account” on page 51
  - “Account Information Inquiry” on page 51
  - “Account Setup Support” on page 52
  - “Account Sign In Help” on page 52

## Account Support

### **Description:**

Matches on support questions from customers looking for assistance in managing their accounts. This intent is also designed to be default match for support questions on account management that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all online account support services available. Also use this intent for setting general help and other support information, and guidelines for browsing through the account support pages.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Update Account Profile

- “Account Support” on page 50
  - **User Account Profile**

### **Description:**

Matches on support questions from customers looking to update their account information and/or preferences; for example, address, email.

**Configuration Recommendations:**

Answer should be contents or links directed at customers looking to update their account profile. Consider also providing content that assists the customers through that process.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Close Account

“Account Support” on page 50



**Close Account**

**Description:**

Matches on questions on customers who are looking to close their account(s). This intent will only match questions where the concept "account" has been identified.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking to close their account(s). Also consider providing answers for customers who are only looking to terminate their billing account, or components of their plans/accounts.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Account Information Inquiry

“Account Support” on page 50



**Account Information Inquiry**

**Description:**

Matches on questions on customers who are looking information about their accounts, including confirming existing plans and services under contract, phone numbers, etc.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking for detail information on their account(s). Consider providing them with links to accessing their account information, service plan contracts in place, etc.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Account Setup Support

“Account Support” on page 50

**Account Setup Support****Description:**

Matches on questions on customers who are looking to setup their accounts online. It also matches on customers looking for support during the process of opening up an online account.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at supporting the account setup process. Consider including links to web pages where the customer can open an account online (or an online account). Also consider adding links for customer needing sign in support in a secondary portlet.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Account Sign In Help

“Account Support” on page 50

**Account Sign In Help****Description:**

Matches on questions on customers who are need help login in to their accounts, including errors in the sign-in process, password resets, etc.



**Configuration Recommendations:**

Answer configuration for this intent should be content directed at supporting the account sign in process. Consider including links to the sign up page or tool. Also consider adding links for customer looking to setup their accounts in a secondary portlet.

**Parameters:**

n/a

**Standard Questions:**

n/a

## General Application Customer Service Inquiry Intents

The following hierarchy contains the General Customer Service Inquiry Intents:

“Customer Service Inquiry” on page 53



“Contact Customer Service” on page 54



“Escalate Customer Help” on page 54

## Customer Service Inquiry

**Description:**

Matches on support questions from customers looking for assistance from or information about the customer service department. This intent and its children do not match on questions specifically at getting product, account or billing support (see other intents for these). Rather, they are designed to match questions where the customer is looking to communicate to the customer department. This intent is also designed to be default match for support questions on customer services that do not have a more specific intent in place.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on communicating with Customer Services. Also use this intent for setting general help and other support information, and guidelines for browsing through the customer services pages.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Contact Customer Service

“Customer Service Inquiry” on page 53



### Contact Customer Service

#### **Description:**

Matches on support questions from customers looking to contact customer services through available communication channels (email, chat, phone, etc.)

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide all available means for communicating with customer services. Consider also providing information in contacting other departments (e.g. billing, system administration). Also consider re-displaying the available self-services tools and support content information.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Escalate Customer Help

“Customer Service Inquiry” on page 53



### Escalate Customer Help

#### **Description:**

Matches on questions where the customer is looking to escalate an issue within customer services. It also matches on questions that were deemed to require intervention by a customer services representative; for example, the customer is identified as frustrated or unhappy with the services they have received online or otherwise.

#### **Configuration Recommendations:**

Answers configuration for this intent should be to provide the means for customers to reach a live representative or to provide them with an escalation vehicle or tool. Carefully consider ensuring that the content presented is appropriate with the state of mind of the customer and that the customer is not presented with content that may be interpreted as uncaring and/or ineffective.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## General Application Billing Inquiry and Support Intents

The following hierarchy contains the General Application Billing and Support Intents:

“Billing Inquiry and Support” on page 55

└─ “Payment Options and Payment Support” on page 56

└─ “Dispute Bill” on page 56

└─ “Balance Inquiry” on page 57

└─ “View Bill Details” on page 57

└─ “Understanding a Bill” on page 58

└─ “Request Bill Copy” on page 58

└─ “Billing Refund Inquiry” on page 59

## Billing Inquiry and Support

### **Description:**

Matches on support questions from customers looking for assistance in managing their accounts. This intent is also designed to be default match for support questions on account management that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all online account support services available. Also use this intent for setting general help and other support information, and guidelines for browsing through the account support pages.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Payment Options and Payment Support

“Billing Inquiry and Support” on page 55



### Payment Options and Payment Support

#### **Description:**

Matches on support questions from customers looking for assistance in making payments and/or changing and verifying their payment schedule or options.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on available options, how to configure/ manage their payment schedules, and how to make payments using these options. Consider including additional customer service contact information should the customer need further assistance with their questions.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Dispute Bill

“Billing Inquiry and Support” on page 55



### Dispute Bill

#### **Description:**

Matches on questions from customers who are disputing the charges or believe there are discrepancies on their bills.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on the process for disputing a billing charge and/or reporting discrepancies on their bills. Consider providing content describing how to read a bill, and the explanation for the different fees and charges.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Balance Inquiry

“Billing Inquiry and Support” on page 55



### Balance Inquiry

#### **Description:**

Matches on questions from customers who are looking to find the current balance on their account. This intent does not match on questions on view or understanding a bill or looking for a copy of a current bill (see other intents for these questions).

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide links for online accessing the balance on their accounts. Consider providing links for setting up for a online account and for signing in to an existing account. If possible, use the profile information to automatically provide the balance, if the customer has already logged in.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## View Bill Details

“Billing Inquiry and Support” on page 55



### View Bill Details

#### **Description:**

Matches on questions from customers who are looking to view the details of a current bill, including the different credits, fees and charges. This intent will not match on questions about understanding the bill, checking the current balance or disputing a bill (see other intents for those questions).

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide links for online accessing the bill details linked to their accounts. Consider providing links for setting up for a online account and for signing in to an existing account, so they can view the bill online. If possible, use the profile information to automatically bring up the bill details, if the customer has already logged in.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Understanding a Bill

“Billing Inquiry and Support” on page 55



### Understanding a Bill

#### **Description:**

Matches on questions from customers who are looking to understanding the details of a bill, including the different credits, fees and charges. This intent will not match on questions about viewing the bill or disputing a bill (see other intents for those questions).

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on how to read a bill, and the explanation for the different fees and charges. Also consider adding information to the process for disputing a billing charge and/or reporting discrepancies on their bills.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Request Bill Copy

“Billing Inquiry and Support” on page 55



### Request Bill Copy

#### **Description:**

Matches on questions from customers who are looking for a copy of their current or previous bills.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on how to request for a copy of a current or a previous bill. Consider also providing links and/or instructions to view a current or previous bill online.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Billing Refund Inquiry

“Billing Inquiry and Support” on page 55



### Billing Refund Inquiry

#### **Description:**

Matches on questions from customers who are looking for a status on receiving a refund or credit or how to apply for a refund or credit.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on how to request for a copy of a current or a previous bill. Consider also providing links and/or instructions on the process for disputing a billing charge and/or reporting discrepancies on their bills.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## General Application General Company Inquiry Intents

The following hierarchy contains the General Application General Company Inquiry Intents:

“General Company Inquiry” on page 59



“Office Location Inquiry” on page 60



“Job Employment Inquiry” on page 60



“Privacy Inquiry” on page 61



“Company Business Hours Inquiry” on page 61

## General Company Inquiry

#### **Description:**

Matches on questions from customers looking for general corporate information about the company (rather than products or services). This intent is also designed to be default match for questions on the company that do not have a more specific intent in place.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on the company; for example, location, management, contact information, investor relations, human resources, partners and

affiliates. Also use this intent for setting general help and other support information, and guidelines for browsing through these pages.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Office Location Inquiry

“General Company Inquiry” on page 59

**Office Location Inquiry****Description:**

Matches on questions from customers looking for location information on the company's offices, branches, stores or dealerships.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide tools or content for locating the company's various offices, branches, dealership and/or stores. Consider also providing links for other important addresses and phone numbers.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Job Employment Inquiry

“General Company Inquiry” on page 59

**Job Employment Inquiry****Description:**

Matches on questions from individuals looking for employment information or looking to apply for a job opening.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide links or tools for employment information or the job application process. Consider providing links to job openings descriptions and to general information on recruiting and/or human resources.



**Parameters:**

n/a

**Standard Questions:**

n/a

## Privacy Inquiry

“General Company Inquiry” on page 59

**Privacy Inquiry****Description:**

Matches on questions from individuals looking for information on the company's policies around data privacy and security. This intent does not match to product related privacy questions.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide information around the company's policies for safeguarding customer information and protecting the privacy of their customers. Consider also providing content around the company's position around using customer information for marketing purposes and processes for opting out from these programs.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Company Business Hours Inquiry

“General Company Inquiry” on page 59

**Company Business Hours Inquiry****Description:**

Matches on questions from individuals looking for company's business hours (including those from specific departments, such as billing and customer services).

**Configuration Recommendations:**

Answer configuration for this intent should be to provide business hours information (workdays, weekends, holidays) for the company and all relevant departments. Consider also adding contact information and the various ways/means available for getting support and services.

**Parameters:**

n/a


**Standard Questions:**

n/a

## General Application Website Inquiry Intents

The following hierarchy contains the General Application Website Inquiry Intents:

“Website Inquiry” on page 62

 “Website Spanish Language Support” on page 62

 “Website Sitemap Inquiry” on page 63

## Website Inquiry

**Description:**

Matches on questions from customers looking for general assistance with using the company website. It will not match questions from customers looking for support on using the company products and services (e.g., account sign in). See other intents for those questions. This intent is also designed to be default match for questions on the website that do not have a more specific intent in place.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide top-level information around how to use the company's website and to deal with the most common errors encountered in using the website. Consider including sign-in help information and other online transactional support content for the more frequent questions; for example, online banking, online payment, etc., as content on secondary portlets.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Website Spanish Language Support

“Website Inquiry” on page 62

 **Website Spanish Language Support**

**Description:**

Matches on questions from customers looking for spanish content or support on the website.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide links or information on obtaining spanish content or support, whether available on the website or other channels.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Website Sitemap Inquiry

“Website Inquiry” on page 62

**Website Sitemap Inquiry****Description:**

Matches on questions from customers looking a map of the website. This intent matches only questions where the customer explicitly asked for the website map and not for the specific location of a particular content set.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide links to the site map.

**Parameters:**

n/a

**Standard Questions:**

n/a

## General Application Intent Parameters

The following parameters are used within the Automotive intents:

“Products Parameter” on page 64

“Your\_Company\_Name Parameter” on page 64

## Products Parameter

### ***Used In:***

“Product Ordering and Sales Support” on page 47

“Product Rebates Inquiry” on page 48

### ***Description:***

The range of the products offered by the company.

### ***Root Concept:***

noun.artifact:merchandise

## Your\_Company\_Name Parameter

### ***Used In:***

“General Company Inquiry” on page 59

### ***Description:***

Name of company and associated synonyms.

### ***Root Concept:***








noun.customerhelp:Your\_Company\_Name

# The Automotive Intent Library Hierarchy

The sections in this guide are arranged to reflect the structure of the Telecommunications Intent Library Hierarchy. For each Intent, the document includes information on:





- The parents of the Intent
- A description of its purpose
- Recommendations for configuring the Intent, where available
- Any Concept Parameters defined within the standard Intent Library
- A list of standard questions that the Intent should match, where available






















The Automotive Intent Library contains the following top-level Intents and their children:

-  “Automotive Product Research Intents” on page 65
-  “Automotive Marketing Program Intents” on page 80
-  “Automotive Financing and Sales Support Intents” on page 82
-  “Automotive Support and Maintenance Intents” on page 85
-  “Automotive Customer Service Inquiry Intents” on page 89
-  “Automotive General Company Inquiry Intents” on page 90
-  “Automotive Website Inquiry Intents” on page 92

## Automotive Product Research Intents

The following hierarchy describes the Automotive Product Research intents:

- “Product Research” on page 66
  -  “Vehicle Adaptive Equipment” on page 67
  -  “Competitive Comparison” on page 68
  -  “Concept Vehicle Inquiry” on page 68
  -  “Fuel Efficiency Research” on page 68

-  “Environmental Impact Research” on page 69
-  “Model Price Research” on page 69
-  “Used Vehicle Research” on page 70
-  “Certified Vehicle Research” on page 70
-  “Vehicle Engineering Research” on page 71
-  “Vehicle Media Information” on page 71
-  “Model Picture Research” on page 72
-  “Vehicle Brochure Request” on page 72
-  “Vehicle Configuration Research” on page 73
-  “Vehicle Accessory Research” on page 74
-  “Model Exterior Color Research” on page 74
-  “Model Interior Color Research” on page 75
-  “Vehicle Option Research” on page 75
-  “Vehicle Model Line Research” on page 76
-  “Vehicle Model Research” on page 76
-  “Vehicle Model Trim Research” on page 77
-  “Forthcoming Model Research” on page 78
-  “Vehicle Safety Research” on page 78
-  “Vehicle Specs Research” on page 79
-  “Towing Capacity Specs Research” on page 79
-  “Vehicle Type Research” on page 80

## Product Research

### ***Description:***

Matches on research questions on the company's products and service offerings. This intent is also designed to be the default match for research questions on products that do not have a more specific intent in place.

**Parameters:**

“Accessory Parameter” on page 94  
“Car Type Parameter” on page 95  
“Competitor Make Parameter” on page 96  
“Competitor Model Parameter” on page 96  
“Concept Car Parameter” on page 96  
“Engineering Feature Parameter” on page 98  
“Forthcoming Model Parameter” on page 98  
“Model Parameter” on page 99  
“Option Package Parameter” on page 101  
“Specification Parameter” on page 102  
“Standard Option Parameter” on page 103  
“Trim Parameter” on page 103  
“Year Parameter” on page 104

**Standard Questions:**

n/a

## Vehicle Adaptive Equipment

“Product Research” on page 66

**Vehicle Adaptive Equipment****Description:**

Matches on questions about access to the company's products and services for people with disabilities or people with restricted accessibility.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Competitive Comparison

“Product Research” on page 66



### Competitive Comparison

#### **Description:**

Matches questions about other car brands or models, as well as questions directly asking for a comparison between the company's product line and that of competitors.

#### **Parameters:**

“Competitor Make Parameter” on page 96

“Competitor Model Parameter” on page 96

#### **Standard Questions:**

n/a

## Concept Vehicle Inquiry

“Product Research” on page 66



### Concept Vehicle Inquiry

#### **Description:**

Matches inquiries about concept cars or other vehicles that have been announced by the company, or that are related to the company's future offerings. Concept cars should be defined as future models not scheduled for production in the forthcoming year. For the latter types of questions, use “Vehicle Model Research” on page 76.

#### **Parameters:**

“Concept Car Parameter” on page 96

#### **Standard Questions:**

n/a

## Fuel Efficiency Research

“Product Research” on page 66



### Fuel Efficiency Research

#### **Description:**

Matches questions aimed at realizing the savings in fuel consumption associated with a model, model type for the current or forthcoming year. Also covers a non-model/year specific inquiry, and inquiries about low-fuel



consumption type of cars, such as hybrid vehicles. This intent does not include questions expressing concerns about the environment or energy policies, nor questions about mileage that don't reflect an interest in reducing cost of ownership.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Environmental Impact Research

“Product Research” on page 66

**Environmental Impact Research****Description:**

Matches questions about environmental impact, such as emissions control, "clean" cars, or types of engines that are designed to minimize pollution, such as fuel cell, electric engines, etc. The focus of these questions is not on fuel economy but on environmental concerns and/or energy policies.

**Parameters:**

n/a

**Standard Questions:**

## Model Price Research

“Product Research” on page 66

**Model Price Research****Description:**

Matches requests for pricing information, whether regarding MSRP, price ranges, or inexpensive models. This intent is designed for currently marketed models only.

**Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

**Standard Questions:**

n/a

## Used Vehicle Research

“Product Research” on page 66



### Used Vehicle Research

#### **Description:**

Matches on research questions about car models manufactured in any year prior to the current year. It is distinct from “Certified Vehicle Research” on page 70, as it does not convey an interest in the certification process.

#### **Parameters:**

“Model Parameter” on page 99

“Previous Year Parameter” on page 102

“Non-Certified Year Parameter” on page 101

“Certified Year Parameter” on page 95

#### **Standard Questions:**

n/a

## Certified Vehicle Research

“Product Research” on page 66



“Used Vehicle Research” on page 70



### Certified Vehicle Research

#### **Description:**

Matches on all research questions pertaining to car models manufactured in years prior to the current year, and which are covered by the company's certified car program(s). It is only matched when concepts clustered around "certified" and/or "pre-owned" are in the question; when these concepts are not present, “Vehicle Model Research” on page 76 is matched instead.

#### **Parameters:**

“Model Parameter” on page 99

“Certified Year Parameter” on page 95

#### **Standard Questions:**

n/a

## Vehicle Engineering Research

“Product Research” on page 66



### Vehicle Engineering Research

#### **Description:**

Matches on questions about the company's distinctive engineering features and/or innovations in the automotive engineering field. Since these are a specific set of features, this intent differs from “Vehicle Specs Research” on page 79. Also, it does not apply to questions about concept cars, which instead match “Concept Vehicle Inquiry” on page 68.

#### **Parameters:**

“Engineering Feature Parameter” on page 98

#### **Standard Questions:**

n/a

## Vehicle Media Information

“Product Research” on page 66



### Vehicle Media Information

#### **Description:**

Matches questions about the company's products (and possibly, image) in the media. This is the parent intent of more targeted inquiries about model pictures, videos, or printed promotional materials.

#### **Parameters:**

“Model Parameter” on page 99

“Car Type Parameter” on page 95

“Year Parameter” on page 104

#### **Standard Questions:**

n/a

## Model Picture Research

“Product Research” on page 66



“Vehicle Media Information” on page 71



### **Model Picture Research**

#### ***Description:***

Matches requests for pictures (including videos) of the currently available (or forthcoming) models. It specifies parameters for model, model type, and current or forthcoming year.

#### ***Parameters:***

“Model Parameter” on page 99

“Car Type Parameter” on page 95

“Year Parameter” on page 104

#### ***Standard Questions:***

n/a

## Vehicle Brochure Request

“Product Research” on page 66



“Vehicle Media Information” on page 71



### **Vehicle Brochure Request**

#### ***Description:***

Matches questions about obtaining a brochure for the current or forthcoming model. It also supports a generic question. This intent is distinct from “Model Picture Research” on page 72.

#### ***Parameters:***

“Model Parameter” on page 99

“Year Parameter” on page 104

#### ***Standard Questions:***

n/a

## Vehicle Configuration Research

“Product Research” on page 66



### Vehicle Configuration Research

#### ***Description:***

This is the parent of the “Vehicle Accessory Research” on page 74, “Model Exterior Color Research” on page 74, “Model Interior Color Research” on page 75 and “Vehicle Option Research” on page 75 intents.

#### ***Parameters:***

“Model Parameter” on page 99

“Year Parameter” on page 104

“Accessory Parameter” on page 94

“Standard Option Parameter” on page 103

“Option Package Parameter” on page 101

#### ***Standard Questions:***

n/a

## Vehicle Accessory Research

“Product Research” on page 66



“Vehicle Configuration Research” on page 73



### Vehicle Accessory Research

#### **Description:**

Matches all questions concerning accessories. Accessories are defined by the associated concept tree, and cover broadly dealer-installed car components (as opposed to factory-installed ones, which are options). This intent also applies to a generic request.

#### **Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

“Accessory Parameter” on page 94

#### **Standard Questions:**

n/a

## Model Exterior Color Research

“Product Research” on page 66



“Vehicle Configuration Research” on page 73



### Model Exterior Color Research

#### **Description:**

Matches questions about available body color choices for a particular model, and also applies to generic questions about colors.

#### **Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

#### **Standard Questions:**

n/a

## Model Interior Color Research

“Product Research” on page 66



“Vehicle Configuration Research” on page 73



### **Model Interior Color Research**

#### ***Description:***

Matches questions about available interior color choices for a particular model, and also applies to generic questions about interior colors. Questions about leather seats (that are not about the color of the leather) are covered by “Vehicle Option Research” on page 75.

#### ***Parameters:***

“Model Parameter” on page 99

“Year Parameter” on page 104

#### ***Standard Questions:***

n/a

## Vehicle Option Research

“Product Research” on page 66



“Vehicle Configuration Research” on page 73



### **Vehicle Option Research**

#### ***Description:***

Matches questions about vehicle options. These are defined in the associated concept tree. Broadly, an option is a factory-installed component that is selected during the sales process.

#### ***Parameters:***

“Model Parameter” on page 99

“Year Parameter” on page 104

“Standard Option Parameter” on page 103

“Option Package Parameter” on page 101

#### ***Standard Questions:***

n/a

## Vehicle Model Line Research

“Product Research” on page 66



### Vehicle Model Line Research

#### **Description:**

Matches questions that pertain to the entire model line. If a model is specified, then “Vehicle Model Research” on page 76 matches instead.

#### **Parameters:**

“Brand Parameter” on page 94

#### **Standard Questions:**

n/a

## Vehicle Model Research

“Product Research” on page 66



### Vehicle Model Research

#### **Description:**

Matches on research questions pertaining to models available on the domestic market. This intent usually applies only to models available in the current or forthcoming year.

#### **Parameters:**

“Current Model Parameter” on page 97

“Discontinued Model Parameter” on page 97

“Year Parameter” on page 104

#### **Standard Questions:**

n/a



## Vehicle Model Trim Research

“Product Research” on page 66



“Vehicle Model Research” on page 76



**Vehicle Model Trim Research**

### ***Description:***

Similar to “Vehicle Model Research” on page 76, but matches on research questions about car models where only the trim is specified.

### ***Parameters:***

“Trim Parameter” on page 103

### ***Standard Questions:***

n/a

## Forthcoming Model Research

“Product Research” on page 66



“Vehicle Model Research” on page 76



**Forthcoming Model Research**

### **Description:**

Matches on research questions pertaining to models that will be available on the domestic market in the near future.

### **Parameters:**

“Forthcoming Model Parameter” on page 98

“Year Parameter” on page 104

### **Standard Questions:**

n/a

## Vehicle Safety Research

“Product Research” on page 66



**Vehicle Safety Research**

### **Description:**

Matches questions about the overall safety features associated with a model or model type. Also covers a non-model/year specific inquiry. This intent does not cover questions about parts, specs or accessories related to safety, such as air bags, brakes, ABS, etc.

### **Parameters:**

“Model Parameter” on page 99

“Car Type Parameter” on page 95

“Year Parameter” on page 104

### **Standard Questions:**

n/a

## Vehicle Specs Research

“Product Research” on page 66



### Vehicle Specs Research

#### **Description:**

Matches questions about car specifications. Specifications are defined in the "automotive spec" concept tree. Covers also a generic inquiry.

#### **Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

“Specification Parameter” on page 102

#### **Standard Questions:**

n/a

## Towing Capacity Specs Research

“Product Research” on page 66



“Vehicle Specs Research” on page 79



### Towing Capacity Specs Research

#### **Description:**

Matches questions about towing capacity. This is a child of “Vehicle Specs Research” on page 79; when no towing capacity information is available, this intent will degrade (match its parent) to the latter.

#### **Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

#### **Standard Questions:**

n/a

## Vehicle Type Research

“Product Research” on page 66



### Vehicle Type Research

#### **Description:**

Matches on research questions pertaining to categories of models for the current (or forthcoming) year. If a car model is specified, then the “Vehicle Model Research” on page 76 intent will match instead. Model types typically include sports-utility-vehicles, vans, minivans, trucks, pickup-trucks; but may also include convertibles, sports-cars, sedans, coupes, or wagons.

#### **Parameters:**

“Car Type Parameter” on page 95

#### **Standard Questions:**

n/a

## Automotive Marketing Program Intents

The following hierarchy describes the Automotive Marketing Program intents:

“Marketing Programs” on page 80



“Merchandise Research” on page 81



“Racing Sponsorships Inquiry” on page 81



“Special Offer Inquiry” on page 82



“Vehicle Show Information” on page 82

## Marketing Programs

#### **Description:**

Parent intent of the marketing research intents, such as “Merchandise Research” on page 81, “Racing Sponsorships Inquiry” on page 81, “Special Offer Inquiry” on page 82, and “Vehicle Show Information” on page 82. This intent matches questions about marketing and promotions that are not covered by these more specific intents.

#### **Parameters:**

“Merchandise Parameter” on page 99

“Model Parameter” on page 99

“Year Parameter” on page 104

**Standard Questions:**

n/a

## Merchandise Research

“Marketing Programs” on page 80

**Merchandise Research****Description:**

Matches inquiries about brand merchandise or merchandise bearing the brand logo. A merchandise concept tree is defined to support this intent. It covers clothing, personal accessories, screen-savers, games, etc.

**Parameters:**

“Merchandise Parameter” on page 99

**Standard Questions:**

n/a

## Racing Sponsorships Inquiry

“Marketing Programs” on page 80

**Racing Sponsorships Inquiry****Description:**

Matches all questions about the company's involvement in racing and other automotive sporting events, and by extension, about the sporting events themselves and the car racing world.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Special Offer Inquiry

“Marketing Programs” on page 80



### Special Offer Inquiry

#### **Description:**

Matches inquiries about incentive sales programs, whether targeted at types of customers, models, and/or years.

#### **Parameters:**

“Special Offer Parameter” on page 102

#### **Standard Questions:**

n/a

## Vehicle Show Information

“Marketing Programs” on page 80



### Vehicle Show Information

#### **Description:**

Matches questions regarding vehicle shows.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Automotive Financing and Sales Support Intents

The following hierarchy describes the Automotive Financing and Sales Support intents:

“Financing and Sales Support” on page 83



“Trade In Sales Inquiry” on page 83



“Vehicle Financing Sales Inquiry” on page 83



“Vehicle Leasing Research” on page 84



“Vehicle Warranty Research” on page 84



“Vehicle Extended Warranty Research” on page 85

## Financing and Sales Support

### **Description:**

Parent intent that covers all sales support questions dealing with financial contracts between the company and the customer. Includes financing, leasing, trade-ins, warranty and extended warranty.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Trade In Sales Inquiry

“Financing and Sales Support” on page 83



**Trade In Sales Inquiry**

### **Description:**

Matches questions about whether trade-in programs are available, or about the value of a vehicle as trade-in.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Vehicle Financing Sales Inquiry

“Financing and Sales Support” on page 83



**Vehicle Financing Sales Inquiry**

### **Description:**

Matches questions about car loans and vehicle financing, including how to calculate payments given a certain model. This intent is distinct from “Vehicle Leasing Research” on page 84.

### **Parameters:**

n/a

**Standard Questions:**

n/a

## Vehicle Leasing Research

“Financing and Sales Support” on page 83

**Vehicle Leasing Research****Description:**

Matches questions about leasing, rate comparisons with respect to financing, terms and conditions of the lease, total cost of ownership, etc.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Vehicle Warranty Research

“Financing and Sales Support” on page 83

**Vehicle Warranty Research****Description:**

Matches questions about warranty. This intent does not apply to part- or accessory-warranty questions. It is also distinct from extended warranty and maintenance contract inquiries, which will match “Vehicle Extended Warranty Research” on page 85.

**Parameters:**

n/a

**Standard Questions:**

n/a



## Vehicle Extended Warranty Research

“Financing and Sales Support” on page 83

└─ “Vehicle Warranty Research” on page 84

└─ **Vehicle Extended Warranty Research**

### **Description:**

Matches questions about extended warranty and maintenance contracts.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Automotive Support and Maintenance Intents

The following hierarchy describes the Automotive Support and Maintenance intents:

“Owner Support and Maintenance” on page 85

└─ “Used Vehicle Market Value Support” on page 86

└─ “Owner Manual Request” on page 86

└─ “Radio Security Code Support” on page 87

└─ “Scheduled Maintenance Support” on page 87

└─ “Scheduled Maintenance Support” on page 87

└─ “Vehicle Recall Inquiry” on page 88

└─ “Vehicle Troubleshooting Support” on page 89

## Owner Support and Maintenance

### **Description:**

This is the parent intent for requests for information or support from owners, including “Scheduled Maintenance Support” on page 87, “Vehicle Recall Inquiry” on page 88, “Radio Security Code Support” on page 87, “Owner Manual Request” on page 86, and “Scheduled Maintenance Support” on page 87.

### **Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

“Maintenance Activity Parameter” on page 98

“Part Parameter” on page 101

### ***Standard Questions:***

## Used Vehicle Market Value Support

“Owner Support and Maintenance” on page 85



### **Used Vehicle Market Value Support**

### ***Description:***

Matches questions aimed at finding out the current market value of a used vehicle. It is distinct from “Trade In Sales Inquiry” on page 83, which is about determining the availability of trade-in programs and/or the value of a used car as a trade-in, and from “Model Price Research” on page 69, which is about the current year's models.

### ***Parameters:***

n/a

### ***Standard Questions:***

n/a

## Owner Manual Request

“Owner Support and Maintenance” on page 85



### **Owner Manual Request**

### ***Description:***

Matches questions regarding the availability of owner manuals. This intent is distinct both from a request for specifications, and for a brochure or photo pamphlet.

### ***Parameters:***

“Model Parameter” on page 99

“Year Parameter” on page 104

### ***Standard Questions:***

n/a

## Radio Security Code Support

“Owner Support and Maintenance” on page 85



### Radio Security Code Support

#### **Description:**

Matches questions about codes that can be entered through the radio or another communication device to disable security devices that control car components.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Scheduled Maintenance Support

“Owner Support and Maintenance” on page 85



### Scheduled Maintenance Support

#### **Description:**

Matches on questions about scheduled maintenance activities and intervals. In addition to the generic question, this intent covers a specific set of service activities, making it distinct from “Vehicle Troubleshooting Support” on page 89.

#### **Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

“Maintenance Activity Parameter” on page 98

#### **Standard Questions:**

n/a

## Vehicle Parts Research

“Owner Support and Maintenance” on page 85



### Vehicle Parts Research

#### **Description:**

Matches all questions concerning car parts. Parts are defined via the "automotive part" concept tree. They are automotive replacement components that can be purchased individually through a dealership. Parts are distinct from accessories and options, as these are not replacement components.

#### **Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

“Part Parameter” on page 101

#### **Standard Questions:**

n/a

## Vehicle Recall Inquiry

“Owner Support and Maintenance” on page 85



### Vehicle Recall Inquiry

#### **Description:**

Matches questions about recalls.

#### **Parameters:**

“Model Parameter” on page 99

“Year Parameter” on page 104

#### **Standard Questions:**

n/a

## Vehicle Troubleshooting Support

“Owner Support and Maintenance” on page 85



### Vehicle Troubleshooting Support

#### **Description:**

Matches on all questions about repair, trouble-shooting, and diagnostics, which are distinct from questions about scheduled maintenance.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Automotive Customer Service Inquiry Intents

The following hierarchy describes the Automotive Customer Service intents:

“Model Price Research” on page 69



“Contact Customer Service” on page 90



“Escalate Customer Service” on page 90

## Customer Service Inquiry

#### **Description:**

Matches on support questions from customers looking for assistance from or information about the customer service department. This intent and its children are designed to match questions about communicating with the customer service department. It is also designed as the default match for customer service support questions that do not match a more specific intent. This intent and its children do not match on questions specifically about product, account, or billing support.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Contact Customer Service

“Model Price Research” on page 69



### Contact Customer Service

#### **Description:**

Matches support questions from customers desiring to contact customer services through available communication channels (email, chat, phone, etc.)

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Escalate Customer Service

“Model Price Research” on page 69



### Escalate Customer Service

#### **Description:**

Matches on questions about escalating an issue within customer services. It also matches on questions that require intervention by a customer services representative (for example, if the customer uses language that indicates frustration or dissatisfaction with the services they have received online or otherwise).

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## Automotive General Company Inquiry Intents

The following hierarchy describes the Automotive General Company intents:

“General Company Inquiry” on page 91



“Dealer Locator Inquiry” on page 91



“Job Employment Inquiry” on page 91

## General Company Inquiry

### **Description:**

Matches on questions from customers looking for general corporate information (rather than products or services). This intent is also designed as the default match for questions about the company that do not match a more specific intent.

### **Parameters:**

“State Parameter” on page 103

“City Parameter” on page 95

“Zip Code Parameter” on page 105

### **Standard Questions:**

n/a

## Dealer Locator Inquiry

“General Company Inquiry” on page 91



### **Dealer Locator Inquiry**

### **Description:**

Matches inquiries about locations of dealerships and service locations.

### **Parameters:**

“State Parameter” on page 103

“City Parameter” on page 95

“Zip Code Parameter” on page 105

### **Standard Questions:**

n/a

## Job Employment Inquiry

“General Company Inquiry” on page 91



### **Job Employment Inquiry**

### **Description:**

Matches on requests for employment or job application information.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Automotive Website Inquiry Intents

The following hierarchy contains the Automotive Website Inquiry intents:

“Website Inquiry” on page 92



“Website Sitemap Inquiry” on page 92



“Website Spanish Language Support” on page 93

## Website Inquiry

**Description:**

Matches on questions from customers looking for general assistance with using the company website. It will not match questions from customers looking for on using the company products and service support (for example, account sign in, company network and connectivity issues, internet services support). See other intents for those questions. This intent is also designed to be default match for questions about the website that do not match a more specific intent.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Website Sitemap Inquiry

“Website Inquiry” on page 92



**Website Sitemap Inquiry**

**Description:**

Matches on questions from customers looking a map of the website. This intent matches only questions in which the customer explicitly asks for the website map and not for the specific location of a particular content set.

**Parameters:**

n/a



**Standard Questions:**

n/a

## Website Spanish Language Support

“Website Inquiry” on page 92

**Website Spanish Language Support****Description:**

Matches all questions in Spanish or about the availability of Spanish language services.

**Parameters:**

n/a

**Standard Questions:**

n/a

## Automotive Intent Parameters

The following parameters are used within the Automotive intents:

“Accessory Parameter” on page 94

“Brand Parameter” on page 94

“Car Type Parameter” on page 95

“Certified Year Parameter” on page 95

“City Parameter” on page 95

“Competitor Make Parameter” on page 96

“Competitor Model Parameter” on page 96

“Concept Car Parameter” on page 96

“Current Year Parameter” on page 97

“Discontinued Model Parameter” on page 97

“Engineering Feature Parameter” on page 98

“Forthcoming Model Parameter” on page 98

“Current Model Parameter” on page 97

“Maintenance Activity Parameter” on page 98

“Merchandise Parameter” on page 99

“Model Parameter” on page 99

“Non-Certified Year Parameter” on page 101

“Option Package Parameter” on page 101

“Part Parameter” on page 101

“Previous Year Parameter” on page 102

“Special Offer Parameter” on page 102

“Specification Parameter” on page 102

“Standard Option Parameter” on page 103

“State Parameter” on page 103

“Trim Parameter” on page 103

“Year Parameter” on page 104

“Zip Code Parameter” on page 105

## Accessory Parameter

### ***Used In:***

“Product Research” on page 66

“Vehicle Configuration Research” on page 73

“Vehicle Accessory Research” on page 74

### ***Description:***

Names of vehicle accessories.

### ***Root Concept:***

noun.artifact:accessory

## Brand Parameter

### ***Used In:***

“Vehicle Model Line Research” on page 76

### ***Description:***

The brand name(s) of the company(ies).

### ***Root Concept:***

noun.auto.model:parent\_company\_make

## Car Type Parameter

### **Used In:**

- “Product Research” on page 66
- “Vehicle Media Information” on page 71
- “Model Picture Research” on page 72
- “Vehicle Safety Research” on page 78
- “Vehicle Type Research” on page 80

### **Description:**

The vehicle type (for example, SUV, pickup, convertible).

### **Root Concept:**

noun.auto.model:car\_type

## Certified Year Parameter

### **Used In:**

- “Used Vehicle Research” on page 70
- “Certified Vehicle Research” on page 70

### **Description:**

Any year prior to the current, covered by the certified vehicle program.

### **Root Concept:**

noun.auto:model\_year

## City Parameter

### **Used In:**

- “General Company Inquiry” on page 91
- “Dealer Locator Inquiry” on page 91

### **Description:**

The city.

### **Root Concept:**

noun.location:city

## Competitor Make Parameter

### ***Used In:***

“Product Research” on page 66

“Competitive Comparison” on page 68

### ***Description:***

A make of car manufactured by a competing company.

### ***Root Concept:***

noun.auto:competitor\_make

## Competitor Model Parameter

### ***Used In:***

“Product Research” on page 66

“Competitive Comparison” on page 68

### ***Description:***

A model of car manufactured by a competing company.

### ***Root Concept:***

noun.auto:competitor\_model

## Concept Car Parameter

### ***Used In:***

“Product Research” on page 66

“Concept Vehicle Inquiry” on page 68

### ***Description:***

A model name or code name of a "concept car".

### ***Root Concept:***

noun.auto:concept\_car

## Current Model Parameter

**Used In:**

“Vehicle Model Research” on page 76

**Description:**

A vehicle that is included in the current product line.

**Root Concept:**

noun.auto.model:current\_model

## Current Year Parameter

**Used In:**

“Marketing Programs” on page 80

**Description:**

The current model year.

**Root Concept:**

noun.auto.model:current\_year

## Discontinued Model Parameter

**Used In:**

“Vehicle Model Research” on page 76

**Description:**

Names of discontinued models.

**Root Concept:**

noun.auto.model:discontinued\_model

## Engineering Feature Parameter

### ***Used In:***

“Product Research” on page 66

“Vehicle Engineering Research” on page 71

### ***Description:***

Name of the engineering feature.

### ***Root Concept:***

noun.auto:engineering\_feature

## Forthcoming Model Parameter

### ***Used In:***

“Product Research” on page 66

“Forthcoming Model Research” on page 78

### ***Description:***

Name of a model that is forthcoming, not currently available.

### ***Root Concept:***

noun.auto.model:forthcoming\_model

## Maintenance Activity Parameter

### ***Used In:***

“Owner Support and Maintenance” on page 85

“Scheduled Maintenance Support” on page 87

### ***Description:***

Name of the maintenance activity; for example, oil change, brakes.

### ***Root Concept:***

noun.auto:maintenance\_activity

## Merchandise Parameter

### ***Used In:***

“Marketing Programs” on page 80

“Merchandise Research” on page 81

### ***Description:***

Name of merchandise item.

### ***Root Concept:***

noun.artifact:merchandise

## Model Parameter

### ***Used In:***

“Product Research” on page 66

“Certified Vehicle Research” on page 70

“Marketing Programs” on page 80

“Model Exterior Color Research” on page 74

“Model Interior Color Research” on page 75

“Model Picture Research” on page 72

“Model Price Research” on page 69

“Owner Support and Maintenance” on page 85

“Owner Manual Request” on page 86

“Radio Security Code Support” on page 87

“Scheduled Maintenance Support” on page 87

“Towing Capacity Specs Research” on page 79

“Used Vehicle Market Value Support” on page 86

“Used Vehicle Research” on page 70

“Vehicle Accessory Research” on page 74

“Vehicle Brochure Request” on page 72

“Vehicle Configuration Research” on page 73

“Vehicle Extended Warranty Research” on page 85

“Vehicle Media Information” on page 71

“Vehicle Option Research” on page 75

“Scheduled Maintenance Support” on page 87

“Vehicle Recall Inquiry” on page 88

“Vehicle Safety Research” on page 78

“Vehicle Specs Research” on page 79

“Vehicle Troubleshooting Support” on page 89

“Vehicle Warranty Research” on page 84



**Description:**

The vehicle model name.

**Root Concept:**

noun.cognition:model3

## Non-Certified Year Parameter

**Used In:**

“Used Vehicle Research” on page 70

**Description:**

Any year prior to the current, not covered by the certified vehicle program.

**Root Concept:**

noun.auto:model\_year

## Option Package Parameter

**Used In:**

“Vehicle Configuration Research” on page 73

**Description:**

The name of the option or option package

**Root Concept:**

noun.auto:option\_package

## Part Parameter

**Used In:**

“Owner Support and Maintenance” on page 85

“Scheduled Maintenance Support” on page 87

**Description:**

Names of vehicle parts.

**Root Concept:**

noun.auto:car\_part

## Previous Year Parameter

**Used In:**

“Certified Vehicle Research” on page 70

**Description:**

The year prior to the current model year.

**Root Concept:**

noun.auto:model\_year

## Special Offer Parameter

**Used In:**

“Special Offer Inquiry” on page 82

**Description:**

The name of the special offer or program.

**Root Concept:**

noun.customerhelp:special\_offer

## Specification Parameter

**Used In:**

“Product Research” on page 66

“Vehicle Specs Research” on page 79

**Description:**

The vehicle specification.

**Root Concept:**

noun.communication:specification

## Standard Option Parameter

### ***Used In:***

“Product Research” on page 66

“Vehicle Configuration Research” on page 73

“Vehicle Option Research” on page 75

### ***Description:***

The name of the standard equipment option.

### ***Root Concept:***

noun.auto:auto\_standard\_option

## State Parameter

### ***Used In:***

“General Company Inquiry” on page 91

“Dealer Locator Inquiry” on page 91

### ***Description:***

The (USA) state.

### ***Root Concept:***

noun.location:American\_state

## Trim Parameter

### ***Used In:***

“Vehicle Model Trim Research” on page 77

### ***Description:***

The name of the trim element.

### ***Root Concept:***

noun.auto.model:trim

## Year Parameter

### ***Used In:***

“Product Research” on page 66  
“Certified Vehicle Research” on page 70  
“Marketing Programs” on page 80  
“Model Exterior Color Research” on page 74  
“Model Interior Color Research” on page 75  
“Model Picture Research” on page 72  
“Model Price Research” on page 69  
“Owner Support and Maintenance” on page 85  
“Owner Manual Request” on page 86  
“Radio Security Code Support” on page 87  
“Scheduled Maintenance Support” on page 87  
“Towing Capacity Specs Research” on page 79  
“Used Vehicle Market Value Support” on page 86  
“Used Vehicle Research” on page 70  
“Vehicle Accessory Research” on page 74  
“Vehicle Brochure Request” on page 72  
“Vehicle Configuration Research” on page 73  
“Vehicle Extended Warranty Research” on page 85  
“Vehicle Media Information” on page 71  
“Vehicle Option Research” on page 75  
“Scheduled Maintenance Support” on page 87  
“Vehicle Recall Inquiry” on page 88  
“Vehicle Safety Research” on page 78  
“Vehicle Specs Research” on page 79  
“Vehicle Troubleshooting Support” on page 89  
  
“Vehicle Warranty Research” on page 84

### ***Description:***

The model year.

### ***Root Concept:***

noun.auto:model\_year

## Zip Code Parameter

### ***Used In:***

“General Company Inquiry” on page 91

“Dealer Locator Inquiry” on page 91

### ***Description:***

The zip code.

### ***Root Concept:***





noun.location:zip\_code

# The Telecommunications Intent Library Hierarchy

The sections in this guide are arranged to reflect the structure of the Telecommunications Intent Library Hierarchy. For each Intent, the document includes information on:

- The parents of the Intent
- A description of its purpose
- Recommendations for configuring the Intent, where available
- Any Concept Parameters defined within the standard Intent Library
- A list of standard questions that the Intent should match, where available

The Telecommunications Intent Library contains the following top-level Intents and their children:

-  [\*Telecom Product Research Intents on page 107\*](#)
-  [\*Telecom Product Support Intents on page 124\*](#)
-  [\*Telecom Product Ordering and Sales Support Intents on page 147\*](#)
-  [\*Telecom Account Support Intents on page 151\*](#)
-  [\*Telecom Customer Service Intents on page 154\*](#)
-  [\*Telecom Billing and Support Intents on page 158\*](#)
-  [\*Telecom General Company Inquiry Intents on page 162\*](#)
-  [\*Telecom Website Inquiry Intents on page 165\*](#)

## Using Product Research and Product Support Intents

Product Research and Product Support Intents and their children are designed to match questions exclusively; a given question will match either a research intent or a support intent, but never both.

Product Support Intents address a more specific class of questions than Product Research Intents. Every Product Research intent has a counterpart Product Support intent; however, the opposite is not true. There are Product Support intents that have no corresponding Product Research counterpart.

The Product Support Intents are, by design, more strictly matched than the Product Research counterparts. Product Support intents will match a question only if there are strong indications in the question that the

customer is looking for assistance with an existing product or support they have acquired and/or contracted with the company.

Product Research intents are more generic, and designed to match the set of questions where the purpose (support vs. research) was not determined or where there is ambiguity in interpreting the customer's question.

Answers to these product research and support intent pairs should reflect this design strategy.

Product Research intents should be broad in nature, and not assume that customers are asking only pre-sales or sales questions. Consideration in the user responses (either in the primary or secondary portlets) should be given to providing information that also cover the support of those products.

Product Support intents, however, should reflect a much higher level of confidence that the customer is looking for support. Providing content research answers is not considered necessary (although links to the information in a secondary portlet is advisable/optional).

## Telecom Product Research Intents

The following hierarchy contains the Telecom Product Research Intents:

### *Product Research on page 108*

#### *Service Plan Research on page 109*

##### *Internet Services Research on page 109*

##### *Prepaid Services Research on page 110*

#### *Service Feature Research on page 110*

##### *Text Messaging Research on page 111*

##### *Instant Messaging Research on page 111*

##### *Email Management Research on page 112*

##### *Calling Areas / Coverage Research on page 112*

##### *Roaming and Cell Phone Network Research on page 113*

##### *Voicemail Management Research on page 113*

##### *Personalization and Content Management Research on page 114*

##### *Ringtones Research on page 114*

##### *Service Plan Minutes Research on page 115*

##### *Purchasing Minutes Research on page 116*

##### *Call Services Research (including Star Keys) on page 116*

- ☐ [Call Block Research on page 117](#)
    - ☐ [Caller ID Research on page 117](#)
  - ☐ [Additional Line or Phone Request Research on page 118](#)
  - ☐ [Phone Equipment Research on page 118](#)
  - ☐ [Wireless Phone Research on page 119](#)
  - ☐ [Camera Phone Research on page 119](#)
    - ☐ [PDA Research on page 120](#)
  - ☐ [Non-Wireless Phone Research on page 120](#)
  - ☐ [Phone Equipment Accessory and Parts Research on page 121](#)
  - ☐ [Other Telco Services Research on page 122](#)
  - ☐ [International Calling Research on page 122](#)
  - ☐ [Calling Card Research on page 123](#)
  - ☐ [Disabled Services Research on page 123](#)

## Product Research

### **Description:**

Matches on research questions on the company's products and service offerings. This intent is also designed to be default match for research questions on products that do not have a more specific intent in place.

### **Configuration Recommendations:**

This intent allows the configuration of answers that should be applied to all of the intents. Or, if desired, it can also be used to provide answers based on a specific returned parameter value.

### **Parameters:**

n/a

### **Standard Questions:**

[Product Research Standard Questions on page 226](#)



## Service Plan Research

[Product Research on page 108](#)



### Service Plan Research

#### **Description:**

Matches on research questions on the company's service plan offerings. Plans may be referred by their brand names or by popular categories (e.g., "Family Plans"). Whenever those appear in the question, parameter(s) will be set with this intent. This intent is also designed to be the default match for research questions on service plans that do not have a more specific intent in place.

#### **Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets.

#### **Parameters:**

[Telecom Service Plans Parameter on page 171](#)

#### **Standard Questions:**

[Service Plan Research Standard Questions on page 234](#)

## Internet Services Research

[Product Research on page 108](#)



[Service Plan Research on page 109](#)



### Internet Services Research

#### **Description:**

Matches on research questions on the company's internet service plan offerings. Internet Plans may be referred by their brand names or by popular categories (e.g., "DSL"). Whenever those appear in the question, parameter(s) will be set with this intent. Definitions of plans that belong in this category can be customized by manipulating the variables for this intent.

#### **Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, consider configuring answers with no parameter settings to setup broad answers on internet services for the ancillary portlets.

#### **Parameters:**

- [Internet Plans Parameter on page 168](#)
- [Internet Services Parameter on page 167](#)

**Standard Questions:**

[Internet Services Research Standard Questions on page 206](#)

**Prepaid Services Research**

[Product Research on page 108](#)

 [Service Plan Research on page 109](#)

 **Prepaid Services Research**

**Description:**

Matches on research questions on the company's prepaid service offerings (e.g., phone cards, prepaid plans). Plans may be referred by their brand names or by popular categories (e.g., "Phone Card"). Whenever those appear in the question, parameter(s) will be set with this intent. Definitions of plans that belong in this category can be customized by manipulating the variables for this intent.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are interested in knowing more about prepaid services offerings and their details.

**Parameters:**

[Pay As You Go Plans Parameter on page 168](#)

**Standard Questions:**

[Prepaid Services Research Standard Questions on page 224](#)

**Service Feature Research**

[Product Research on page 108](#)

 **Service Feature Research**

**Description:**

Matches on research questions on the features offered by the company with a service plan. Features may be referred by their brand names or by popular categories (e.g., "mobile-to-mobile minutes"). This intent is also designed to be default match for research questions on service features that do not have a more specific intent in place. Answers can be configured for these using the available parameter values.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets.

**Parameters:**

n/a

**Standard Questions:**

[Service Feature Research Standard Questions on page 231](#)

**Text Messaging Research**

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 **Text Messaging Research**

**Description:**

Matches on research questions on the different types of text messaging (with the exception of instant messaging, which is its own intent). This intent is also designed to be default match for research questions when the more generic "message" term is used.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are interested in knowing more about text messaging features. In addition, consider providing links for web-based text messaging tools and instructions on how to use text messaging. Since this intent is also the catch-all for questions using generic "message" term, consider providing related answers/links on ancillary portlets on instant messaging.

**Parameters:**

n/a

**Standard Questions:**

[Text Messaging Research Standard Questions on page 237](#)

**Instant Messaging Research**

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 **Instant Messaging Research**

**Description:**

Matches on research questions on the different types of instant messaging. This intent is specifically designed to match only when it is clear that the question was about instant messaging. If the question is ambiguous about the messaging feature being asked (e.g. "Can I send a message?"), the intent will not match the question. Instead, it will match the Text Messaging Research Intent.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are interested in knowing more about instant messaging features. In addition, consider providing links for web-based instant messaging tools, software downloads and instructions on how to use instant messaging.

**Parameters:**

n/a

**Standard Questions:**

[Instant Messaging Research Standard Questions on page 203](#)

**Email Management Research**

[Product Research on page 108](#)



[Service Feature Research on page 110](#)



**Email Management Research**

**Description:**

Matches on research questions on email feature offerings and email management options. This intent will be triggered for both wireless and non-wireless email service features and management questions.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are interested in knowing more about email features and how to manage and maintain emails. In addition, consider providing links for email management tutorials and web-based email tool(s).

**Parameters:**

n/a

**Standard Questions:**

[Email Management Research Standard Questions on page 201](#)

**Calling Areas / Coverage Research**

[Product Research on page 108](#)



[Service Feature Research on page 110](#)



**Calling Areas / Coverage Research**

**Description:**

Matches on research questions on a service plan's coverage or calling areas and questions around service availability. This intent applies to both wireless and non-wireless plans.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are interested in knowing more about cell networks, including definition, comparisons and availability. Content around roaming charges and applicability should also be considered. In addition, consider providing links to coverage area maps and network layouts.

**Parameters:**

n/a

**Standard Questions:**

[Calling Areas And Coverage Research Standard Questions on page 190](#)

## Roaming and Cell Phone Network Research

[Product Research on page 108](#)



[Service Feature Research on page 110](#)



**Roaming and Cell Phone Network Research**

**Description:**

Matches on research questions on voicemail feature offerings and voicemail management options. This intent will be triggered for both wireless and non-wireless voicemail service features and management questions.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are interested in knowing more about voicemail features and how to manage and maintain voicemail. In addition, consider providing links for voicemail management tutorials and web-based voicemail tool(s).

**Parameters:**

n/a

**Standard Questions:**

[Roaming and Cell Phone Network Research Standard Questions on page 230](#)

## Voicemail Management Research

[Product Research on page 108](#)



[Service Feature Research on page 110](#)



**Voicemail Management Research**

**Description:**

Matches on research questions on voicemail feature offerings and voicemail management options. This intent will be triggered for both wireless and non-wireless voicemail service features and management questions.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are interested in knowing more about voicemail features and how to manage and maintain voicemail. In addition, consider providing links for voicemail management tutorials and web-based voicemail tool(s).

**Parameters:**

n/a

**Standard Questions:**

[Voicemail Management Research Standard Questions on page 247](#)

**Personalization and Content Management Research**

[Product Research on page 108](#)



[Service Feature Research on page 110](#)



**Personalization and Content Management Research**

**Description:**

Matches on personalization feature research questions on the features offered by the company with a service plan. Personalization Features may be referred by their brand names or by popular categories (e.g., "alerts", "themes"). This also refers to feature/content provided and/or managed by the company (e.g., "album", "games", "themes"). This intent is designed to be default match for research questions on personalization and content management features that do not have a more specific intent in place. Answers can be configured for these using the available parameter values.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Answers should be content directed at customers who are interested in a particular personalization feature. Consider adding links for download of content and/or managing/storing content. In addition, a non-parameterized answer presenting a top-level view of all the personalization features, content, and content management available should be considered.

**Parameters:**

[Personalized Content Parameter on page 169](#)

**Standard Questions:**

[Personalization and Content Management Research Standard Questions on page 215](#)

**RINGTONES RESEARCH**

[Product Research on page 108](#)



[Service Feature Research on page 110](#)



[Personalization and Content Management Research on page 114](#)



**Ringtones Research**

**Description:**

Matches on research questions on phone ring tones personalization offerings and configuration options.

**Configuration Recommendations:**

Answers should be content directed at customers who are interested in a ring tones and ring tones configuration. Consider adding links for download or purchasing ring tones as well as configuring and managing them. In addition, consider ancillary portlets on popular ring tones, ring tones player(s), and promotional ring tones or ring tone themes.

**Parameters:**

n/a

**Standard Questions:**

[Ringtones Research Standard Questions on page 228](#)

**Service Plan Minutes Research**

[Product Research on page 108](#)



[Service Feature Research on page 110](#)



**Service Plan Minutes Research**

**Description:**

Matches on research questions on minutes (e.g., night and weekends, mobile-to-mobile, etc.) feature offerings, details and management options available with a customer plan. This intent is also designed to be default match for research questions on minutes that do not have a more specific intent in place.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets.

**Parameters:**

n/a

**Standard Questions:**

[Service Plan Minutes Research Standard Questions on page 232](#)

## **PURCHASING MINUTES RESEARCH**

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Service Plan Minutes Research on page 115](#)

 **Purchasing Minutes Research**

### **Description:**

Matches on research questions on acquiring or adding minutes to any service plan.

### **Configuration Recommendations:**

Answers should be content directed at customers who are interested in purchasing, adding or finding more information on the different minutes categories available. Consider adding links for changing plans, purchasing minutes on pre-paid plans.

### **Parameters:**

n/a

### **Standard Questions:**

[Purchasing Minutes Research Standard Questions on page 226](#)

## **Call Services Research (including Star Keys)**

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 **Call Services Research (including Star Keys)**

### **Description:**

Matches on research questions on the different call services (e.g., call forward, call waiting, 3-way calling, etc.) feature offerings, details and management options available. This intent is also designed to be default match for research questions on Call Services that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Consider adding links for changing and/or signing up for these service features. Also, use "parent" parameters to setup answers for the ancillary portlets.

### **Parameters:**

[Call Services Parameter on page 167](#)

### **Standard Questions:**


[Call Services Research Standard Questions on page 188](#)



## CALL BLOCK RESEARCH

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Call Services Research \(including Star Keys\) on page 116](#)

 **Call Block Research**

### **Description:**

Matches on research questions on the different types of call blocking services available.

### **Configuration Recommendations:**

Answers should be content directed at customers who are interested in purchasing, adding or finding more information on the different call block services available. Consider adding links for changing and/or signing up for these service features.

### **Parameters:**

n/a


### **Standard Questions:**

[Call Block Research Standard Questions on page 187](#)

## CALLER ID RESEARCH

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Call Services Research \(including Star Keys\) on page 116](#)

 **Caller ID Research**

### **Description:**

Matches on research questions on the different types of caller ID services available.

### **Configuration Recommendations:**

Answers should be content directed at customers who are interested in purchasing, adding or finding more information on the different caller ID services available. Consider adding links for changing and/or signing up for these service features.

### **Parameters:**

n/a

### **Standard Questions:**

[Caller ID Research Standard Questions on page 190](#)

## Additional Line or Phone Request Research

[Product Research on page 108](#)



### Additional Line or Phone Request Research

#### **Description:**

Matches on research questions on adding line(s) or phone(s) to an existing service plan.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all phone equipment provided. Also use this intent for setting promotions and other product marketing information, and for guidelines for browsing through the phone equipment offerings.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Additional Line or Phone Request Research Standard Questions on page 178](#)

## Phone Equipment Research

[Product Research on page 108](#)



### Phone Equipment Research

#### **Description:**

Matches on research questions on the company's phone equipment offerings. This intent is also designed to be default match for research questions on phone equipment that do not have a more specific intent in place. This intent is also designed to be default match for research questions when the more generic "phone" term is used.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all phone equipment provided. Also use this intent for setting promotions and other product marketing information, and for guidelines for browsing through the phone equipment offerings.

#### **Parameters:**

[Telephones Parameter on page 171](#)

#### **Standard Questions:**

[Phone Equipment Research Standard Questions on page 220](#)

## Wireless Phone Research

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 **Wireless Phone Research**

### **Description:**

Matches on research questions on the wireless phones offerings. Phone may be referred in the question by their model/manufacturer or brand name or by popular categories and/or characteristics (e.g., "flip phones", "cheap cellphone"). Whenever the model/manufacture or brand name is specified, parameter(s) will be set with this intent.

### **Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets. Answers should be content directed at customers who are interested in purchasing or finding more information on wireless phones.

### **Parameters:**

[Cell Phones Parameter on page 167](#)

### **Standard Questions:**

[Wireless Phone Research Standard Questions on page 249](#)

## CAMERA PHONE RESEARCH

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 [Wireless Phone Research on page 119](#)

 **Camera Phone Research**

### **Description:**

Matches on research questions on camera phones or camera phone features. Note that this intent only matches on questions where the concept of "camera" is identified. If a model/manufacture and/or brand name is specified, it will be ignored by this intent (even if the model has a camera feature).

### **Configuration Recommendations:**

Answers should be content directed at customers who are interested in purchasing or finding more information on camera phones. Consider showing popular and recent models that are available in the secondary portlets.

**Parameters:**

n/a

**Standard Questions:**

[Camera Phone Research Standard Questions on page 192](#)

**PDA RESEARCH**

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 [Wireless Phone Research on page 119](#)

 **PDA Research**

**Description:**

Matches on research questions on PDA phones. Note that this intent only matches on questions where the concept of "PDA" is identified. If a model/manufacturer and/or brand name is specified, it will be ignored by this intent (even if the model is a PDA).

**Configuration Recommendations:**

Answers should be content directed at customers who are interested in purchasing or finding more information on PDA phones. Consider showing popular and recent models that are available in the secondary portlets.

**Parameters:**

[PDA Parameter on page 169](#)

**Standard Questions:**

[PDA Research Standard Questions on page 213](#)

**Non-Wireless Phone Research**

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 **Non-Wireless Phone Research**

**Description:**

Matches on research questions on non-wireless phones offerings. Phone may be referred in the question by their model/manufacturer or brand name or by popular categories and/or characteristics (e.g., "cordless phones"). Whenever the model/manufacture or brand name is specified, parameter(s) will be set with this intent.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets. Answers should be content directed at customers who are interested in purchasing or finding more information on non-wireless phones.

**Parameters:**

[Landline Phones Parameter on page 168](#)

**Standard Questions:**

[Non-Wireless Phone Research Standard Questions on page 209](#)

**Phone Equipment Accessory and Parts Research**

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 **Phone Equipment Accessory and Parts Research**

**Description:**

Matches on research questions on the company's phone equipment accessories and phone equipment parts offerings. Accessories and Parts may be referred by their brand names ("jabra") or by popular categories (e.g., "headphones", charges, batteries, etc.). Whenever those appear in the question, parameter(s) will be set with this intent.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets.

**Parameters:**

[Telecom Accessories Parameter on page 170](#)

[Telecom Parts Parameter on page 170](#)

**Standard Questions:**

[Phone Equipment Accessory and Parts Research Standard Questions on page 217](#)

## Other Telco Services Research

[Product Research on page 108](#)



### Other Telco Services Research

#### **Description:**

This intent is the parent intent for a collection of intents around other services provided by the company. Note that this intent is strictly a parent intent and will be triggered every time a child intent is triggered and will not be triggered otherwise.

#### **Configuration Recommendations:**

Consider using this intent for setting secondary portlets or answers which are common to all its children intents. Otherwise, this intent should not be configured.

#### **Parameters:**

n/a

#### **Standard Questions:**

n/a

## International Calling Research

[Product Research on page 108](#)



[Other Telco Services Research on page 122](#)



### International Calling Research

#### **Description:**

Matches on research questions on the company's on making or receiving international calls, and making or receiving calls or using phones and services in foreign countries.

#### **Configuration Recommendations:**

As this intent covers a myriad of international services research questions, consider providing content that covers all possible internationally related information, including international features or components of plans, calling and receiving international calls, and using services internationally.

#### **Parameters:**

n/a

#### **Standard Questions:**

[International Calling Research Standard Questions on page 204](#)

## Calling Card Research

[Product Research on page 108](#)

 [Other Telco Services Research on page 122](#)

 **Calling Card Research**

### **Description:**

Matches on research questions on the company's calling card offerings, including applying, ordering and pricing, whether as part of the plan or as a separate offering. Note that this intent will not match on research questions on prepaid phone card or credit card offerings.

### **Configuration Recommendations:**

Answers should be content directed at customers who are interested in acquiring or finding more information on calling cards and calling card features.

### **Parameters:**

n/a

### **Standard Questions:**

[Calling Card Research Standard Questions on page 192](#)

## Disabled Services Research

[Product Research on page 108](#)

 [Other Telco Services Research on page 122](#)

 **Disabled Services Research**

### **Description:**

Matches on research questions on the company's phone services or service features for disabled customers, whether as part of a company's plans or not.

### **Configuration Recommendations:**

Answers should be content directed at customers who are interested in using or finding more information on the company's phone services and service features for the disabled.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Telecom Product Support Intents

The following hierarchy contains the Telecom Product Support Intents:

*Product Support on page 125*

 *Service Plan Support on page 126*

 *Internet Services Support on page 126*

 *Prepaid Services Support on page 127*

 *Change Plans on page 127*

 *Change Service Providers on page 128*

 *Relocation Support on page 129*

 *Service Suspension / (Re-)Activation Support on page 129*

 *Cancel Plan on page 130*

 *Contract Expiration Support on page 130*

 *Service Feature Support on page 131*

 *Text Messaging Support on page 131*

 *Instant Messaging Support on page 132*

 *Email Management Support on page 132*

 *Calling Areas / Coverage Support on page 133*

 *Roaming and Cell Phone Network Support on page 133*

 *Voicemail Management Support on page 134*

 *Personalization and Content Management Support on page 134*

 *Ringtones Support on page 135*

 *Service Plan Minutes Support on page 136*



















 *Purchasing Minutes Support on page 136*

 *Call Services Support (Star Keys) on page 137*

 *Call Block Support on page 137*

 *Caller ID Support on page 138*



-  [Additional Line or Phone Request Support on page 138](#)
-  [Phone Equipment Support on page 139](#)
  -  [Wireless Phone Support on page 139](#)
    -  [Wireless Camera Phone Support on page 140](#)
    -  [Wireless PDA Support on page 140](#)
  -  [Non-Wireless Phone Support on page 141](#)
  -  [Phone Equipment Accessory and Parts Support on page 141](#)
  -  [Upgrade Phone on page 142](#)
  -  [Unlock Phone Password Codes on page 142](#)
  -  [Phone Equipment Documentation on page 143](#)
-  [Other Telco Services Support on page 143](#)
  -  [International Calling Support on page 144](#)
  -  [Calling Card Support on page 144](#)
  -  [Disabled Services Support on page 145](#)
  -  [Directory Info Support on page 145](#)
  -  [Number Portability Inquiry on page 146](#)
  -  [Area/Country Lookup on page 146](#)
  -  [Reverse Number Lookup on page 147](#)

## Product Support

### **Description:**

Matches on support questions on the company's products and service offerings. This intent is also designed to be default match for support questions on products that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all the products and services support provided. Also use this intent for setting general help and other support information, and guidelines for browsing through the products and service support tools.

**Parameters:**

[Telecom Products Parameter on page 170](#)

## Service Plan Support

[Product Support on page 125](#)



Service Plan Support

**Description:**

Matches on support questions on the company's service plans. Plans may be referred by their brand names or by popular categories (e.g., "Family Plans"). Whenever those appear in the question, parameter(s) will be set with this intent. This intent is also designed to be the default match for support questions on service plans that do not have a more specific intent in place.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets.

**Parameters:**

[Telecom Service Plans Parameter on page 171](#)

**Standard Questions:**

[Service Plan Support Standard Questions on page 237](#)

## Internet Services Support

[Product Support on page 125](#)



[Service Plan Support on page 126](#)



Internet Services Support

**Description:**

Matches on support questions on the company's internet service plans. Internet Plans may be referred by their brand names or by popular categories (e.g., "DSL"). Whenever those appear in the question, parameter(s) will be set with this intent. Definitions of plans that belong in this category can be customized by manipulating the variables for this intent.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, consider configuring answers with no parameter settings to setup broad answers on internet services for the ancillary portlets.

**Parameters:**

[Internet Plans Parameter on page 168](#)

[Internet Services Parameter on page 167](#)

**Standard Questions:**

[Internet Services Support Standard Questions on page 208](#)

## Prepaid Services Support

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 **Prepaid Services Support**

**Description:**

Matches on support questions on the company's prepaid services (e.g., phone cards, prepaid plans). Plans may be referred by their brand names or by popular categories (e.g., "Phone Card"). Whenever those appear in the question, parameter(s) will be set with this intent. Definitions of plans that belong in this category can be customized by manipulating the variables for this intent.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking for support on prepaid services offerings and their details.

**Parameters:**

[Prepaid Phone Cards Parameter on page 169](#)

**Standard Questions:**

[Prepaid Services Support Standard Questions on page 224](#)

## Change Plans

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 **Change Plans**

**Description:**

Matches on questions about changing an existing plan (either to another plan or making a modification to the existing plan). This intent does not include changing from or to another service provider (see Change Service Provider, for those questions).

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking to make changes to their current plan(s) or downgrade/upgrade to another plan. Also, consider adding links for changing to/from another service provider, as customers are occasionally confused about their intentions.

**Parameters:**

n/a

**Standard Questions:**

[Change Plans Standard Questions on page 193](#)

**Change Service Providers**

[Product Support on page 125](#)



[Service Plan Support on page 126](#)



**Change Service Providers**

**Description:**

Matches on questions about changing to/from another service provider. This intent does not include questions about changing an existing plan. (see Change Plans, for those questions).

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking at changing to/from another service provider. Also, consider adding links for information on how to make changes to their current plan(s) or downgrade/upgrade to another plan, as customers are occasionally confused about their intentions.

**Parameters:**

[Telecom Service Providers Parameter on page 171](#)

**Standard Questions:**

[Change Service Providers Standard Questions on page 194](#)

## Relocation Support

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 **Relocation Support**

### **Description:**

Matches on questions about customers who looking to relocate their services to a new address or area. This intent does not include questions about changing features of an existing plan, or making changes to their account information. (see Change Plans and Update Account Profile, respectively, for those questions).

### **Configuration Recommendations:**

Answer configuration for this intent should be content directed at supporting customers who are moving to a new area or address. Consider adding secondary answers on changing account profile, as customers sometimes confuse these two activities.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Service Suspension / (Re-)Activation Support

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 **Service Suspension / (Re-)Activation Support**

### **Description:**

Matches on questions about customers who are looking for support in suspending or (re-)activating their phone services. It also matches on questions on company initiated service suspension.

### **Configuration Recommendations:**

Answer configuration for this intent should be content directed at supporting customers who are looking at suspending or (re-) activating their services, and answering questions on company initiated suspensions. Also consider providing links for managing the temporary stoppage of services (and reactivation), if these are available on line.

### **Parameters:**

n/a

### **Standard Questions:**

[Service Suspension Or Reactivation Support Standard Questions on page 237](#)

## Cancel Plan

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 **Cancel Plan**

### **Description:**

Matches on questions on customers who are looking to cancel their service plan(s). This intent will only match questions where the concept "plan" has been identified. Another intent, Close Account, will match questions where the term "account" has been identified. This has been done in this manner for companies where these intents are considered different.

### **Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking to cancel their plan(s). Also consider providing answers for customers who are only looking to terminate their billing account, or components of their plans/accounts. Also, consider keeping the content similar between this intent and "Close Account", if both intents are considered to be the same.

### **Parameters:**

n/a

### **Standard Questions:**

[Cancel Plan Standard Questions on page 193](#)

## Contract Expiration Support

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 **Contract Expiration Support**

### **Description:**

Matches on support questions from customers looking to learn more about their contract termination dates, what happens once a contract terminates and how to extend their contract. It will not match questions on terminating contract (see Cancel Plans) or modifying contracts (see Change Plans).

### **Configuration Recommendations:**

n/a

### **Parameters:**

n/a

**Standard Questions:**

[Contract Expiration Support Standard Questions on page 198](#)

## Service Feature Support

[Product Support on page 125](#)



**Service Feature Support**

**Description:**

Matches on support questions on the features offered by the company with a service plan. Features may be referred by their brand names or by popular categories (e.g., "mobile-to-mobile minutes"). This intent is also designed to be default match for support questions on service features that do not have a more specific intent in place. Answers can be configured for these using the available parameter values.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets.

**Parameters:**

n/a

**Standard Questions:**

[Service Feature Support Standard Questions on page 232](#)

## Text Messaging Support

[Product Support on page 125](#)



[Service Feature Support on page 131](#)



**Text Messaging Support**

**Description:**

Matches on support questions on the different types of text messaging (with the exception of instant messaging, which is its own intent). This intent is also designed to be default match for support questions when the more generic "message" term is used.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking for support in using text messaging features. In addition, consider providing links for web-based text messaging tools and instructions on how to use text messaging. Since this intent is also the catch-all for questions using generic "message" term, consider providing related answers/links on ancillary portlets on all messaging features.

**Parameters:**

n/a

**Standard Questions:**[Text Messaging Support Standard Questions on page 239](#)**Instant Messaging Support**[Product Support on page 125](#)[Service Feature Support on page 131](#)**Instant Messaging Support****Description:**

Matches on support questions on the different types of instant messaging. This intent is specifically designed to match only when it is clear that the question was about instant messaging. If the question is ambiguous about the messaging feature being asked (e.g. "Can I send a message?"), the intent will not match the question. Instead, it will match the Text Messaging Support Intent.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking for support in using instant messaging features. In addition, consider providing links for web-based instant messaging tools, software downloads and instructions on how to use instant messaging.

**Parameters:**

n/a

**Standard Questions:**

n/a

**Email Management Support**[Product Support on page 125](#)[Service Feature Support on page 131](#)**Email Management Support****Description:**

Matches on support questions on email features and email management options. This intent will be triggered for both wireless and non-wireless email service features and management questions.



**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking for support in using, managing and maintaining email features. In addition, consider providing links for email management tutorials and web-based email tool(s).

**Parameters:**

n/a

**Standard Questions:**

[Email Management Support Standard Questions on page 201](#)

**Calling Areas / Coverage Support**

[Product Support on page 125](#)



[Service Feature Support on page 131](#)



**Calling Areas / Coverage Support**

**Description:**

Matches on support questions on a service plan's coverage or calling areas and questions around service availability. This intent applies to both wireless and non-wireless plans.

**Configuration Recommendations:**

Answer configuration for this intent should be support content around service area availability and/or coverage area (within country and outside). In addition, consider providing links for coverage area maps and service availability verification tool(s).

**Parameters:**

n/a

**Standard Questions:**

n/a

**Roaming and Cell Phone Network Support**

[Product Support on page 125](#)



[Service Feature Support on page 131](#)



**Roaming and Cell Phone Network Support**

**Description:**

Matches on support questions on roaming and the different cell based network standards (e.g. GSM, GPRS). This intent applies only to wireless questions.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking for support in using cell networks. Content around roaming charges and applicability should also be considered. In addition, consider providing links to coverage area maps and network layouts

**Parameters:**

n/a

**Standard Questions:**

[Roaming and Cell Phone Network Support Standard Questions on page 230](#)

**Voicemail Management Support**

[Product Support on page 125](#)



[Service Feature Support on page 131](#)



**Voicemail Management Support**

**Description:**

Matches on support questions on voicemail features and management options. This intent will be triggered for both wireless and non-wireless voicemail service features and management questions.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking for support in using, managing and maintaining voicemail features. In addition, consider providing links for voicemail management tutorials and web-based voicemail tool(s).

**Parameters:**

n/a

**Standard Questions:**

[Voicemail Management Support Standard Questions on page 247](#)

**Personalization and Content Management Support**

[Product Support on page 125](#)



[Service Feature Support on page 131](#)



**Personalization and Content Management Support**

**Description:**

Matches on personalization feature support questions on the features offered by the company with a service plan. Personalization Features may be referred by their brand names or by popular categories (e.g., "alerts", "themes"). This also refers to feature/content provided and/or managed by the company (e.g., "album",

"games", "themes"). This intent is designed to be default match for support questions on personalization and content management features that do not have a more specific intent in place. Answers can be configured for these using the available parameter values.

### **Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Answers should be content directed at customers who are looking for support on a particular personalization feature. Consider adding links for download of content and/or managing/storing content. In addition, a non-parameterized answer presenting a top-level view of all support content for the personalization features, content, and content management available should be considered.

### **Parameters:**

[Personalized Content Parameter on page 169](#)

### **Standard Questions:**

[Personalization and Content Management Support Standard Questions on page 217](#)

## **RINGTONES SUPPORT**

[Product Support on page 125](#)



[Service Feature Support on page 131](#)



[Personalization and Content Management Support on page 134](#)



**Ringtones Support**

### **Description:**

Matches on research questions on phone ring tones personalization offerings and configuration options.

### **Configuration Recommendations:**

Answers should be content directed at customers who are interested in a ring tones and ring tones configuration. Consider adding links for download or purchasing ring tones as well as configuring and managing them. In addition, consider ancillary portlets on popular ring tones, ring tones player(s), and promotional ring tones or ring tone themes.

### **Parameters:**

n/a

### **Standard Questions:**

[Ringtones Support Standard Questions on page 230](#)

## Service Plan Minutes Support

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 **Service Plan Minutes Support**

### **Description:**

Matches on research questions on minutes (e.g., night and weekends, mobile-to-mobile, etc.) feature offerings, details and management options available with a customer plan. This intent is also designed to be default match for research questions on minutes that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets.

### **Parameters:**

n/a

### **Standard Questions:**

[Service Plan Minutes Support Standard Questions on page 234](#)

## **PURCHASING MINUTES SUPPORT**

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Service Plan Minutes Support on page 136](#)

 **Purchasing Minutes Support**

### **Description:**

Matches on support questions on acquiring or adding minutes to any service plan.

### **Configuration Recommendations:**

Answers should be content directed at customers who are looking for support in purchasing and/or adding minutes to their current plan(s). Consider adding links for changing plans, purchasing minutes on pre-paid plans.

### **Parameters:**

n/a

### **Standard Questions:**

[Purchasing Minutes Support Standard Questions on page 226](#)

## Call Services Support (Star Keys)

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Service Plan Minutes Support on page 136](#)

 **Call Services Support (Star Keys)**

### **Description:**

Matches on support questions on the different call services (e.g., call forward, call waiting, 3-way calling, etc.) feature offerings, details and management options. This intent is also designed to be default match for support questions on Call Services that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Consider adding links for changing and/or signing up for these service features. Also, use "parent" parameters to setup answers for the ancillary portlets.

### **Parameters:**

[Call Services Parameter on page 167](#)

### **Standard Questions:**

[Call Services Support Standard Questions on page 188](#)

## **CALL BLOCK SUPPORT**

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Call Services Support \(Star Keys\) on page 137](#)

 **Call Block Support**

### **Description:**

Matches on support questions on the different types of call blocking services available.

### **Configuration Recommendations:**

Answers should be content directed at customers who are looking for support using the different call block services. Consider adding links for changing and/or signing up for these service features.

### **Parameters:**

n/a

**Standard Questions:**

[Call Block Support Standard Questions on page 187](#)

**CALLER ID SUPPORT**

[Product Support on page 125](#)



[Service Feature Support on page 131](#)



[Call Services Support \(Star Keys\) on page 137](#)



**Caller ID Support**

**Description:**

Matches on support questions on the different types of caller ID services available.

**Configuration Recommendations:**

Answers should be content directed at customers who are looking for support using the different caller ID services. Consider adding links for changing and/or signing up for these service features.

**Parameters:**

n/a

**Standard Questions:**

[Caller ID Support Standard Questions on page 190](#)

**Additional Line or Phone Request Support**

[Product Support on page 125](#)



**Additional Line or Phone Request Support**

**Description:**

Matches on support questions on adding line(s) or phone(s) to an existing service plan.

**Configuration Recommendations:**

Answers should be content directed at customers who are looking for support in adding an additional line or phone for an existing customer account.

**Parameters:**

n/a

**Standard Questions:**

[Additional Line or Phone Request Support Standard Questions on page 179](#)

## Phone Equipment Support

[Product Support on page 125](#)



### Phone Equipment Support

#### **Description:**

Matches on support questions on the company's phone equipment. This intent is also designed to be default match for support questions on phone equipment that do not have a more specific intent in place. This intent is also designed to be default match for support questions when the more generic "phone" term is used.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all the phone equipment support provided. Also use this intent for setting general phone equipment help and other support information, and guidelines for browsing through the phone equipment support tools.

#### **Parameters:**

[Telephones Parameter on page 171](#)

#### **Standard Questions:**

[Phone Equipment Support Standard Questions on page 220](#)

## Wireless Phone Support

[Product Support on page 125](#)



[Phone Equipment Support on page 139](#)



### Wireless Phone Support

#### **Description:**

Matches on support questions on the wireless phones offerings. Phone may be referred in the question by their model/manufacture or brand name or by popular categories and/or characteristics (e.g., "flip phones", "cheap cellphone"). Whenever the model/manufacture or brand name is specified, parameter(s) will be set with this intent.

#### **Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets. Answers should be content directed at customers who are looking for detail support on wireless phones.

#### **Parameters:**

[Cell Phones Parameter on page 167](#)

#### **Standard Questions:**

[Wireless Phone Support Standard Questions on page 251](#)

## WIRELESS CAMERA PHONE SUPPORT

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 [Wireless Phone Support on page 139](#)

 **Wireless Camera Phone Support**

### **Description:**

Matches on support questions on camera phones or camera phone features. Note that this intent only matches on questions where the concept of "camera" is identified. If a model/manufacture and/or brand name is specified, it will be ignored by this intent (even if the model has a camera feature).

### **Configuration Recommendations:**

Answers should be content directed at customers who are looking for support on camera phones and using the camera features of the phone. Also consider providing content on managing pictures and video information on phones, and ways in which to find support pages/documentation on using specific camera phones.

### **Parameters:**

n/a

## WIRELESS PDA SUPPORT

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 [Wireless Phone Support on page 139](#)

 **Wireless PDA Support**

### **Description:**

Matches on support questions on PDA phones. Note that this intent ONLY matches on questions where the concept of "PDA" is identified. If a model/manufacture and/or brand name is specified, it will be ignored by this intent (even if the model is a PDA).

### **Configuration Recommendations:**

Answers should be content directed at customers who are looking for support on PDA phones and using its features. Also consider providing content on managing content on PDA phones, and ways in which to find support pages/documentation on using specific PDA phones.

### **Parameters:**

n/a



**Standard Questions:**

[PDA Support Standard Questions on page 213](#)

**Non-Wireless Phone Support**

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 **Non-Wireless Phone Support**

**Description:**

Matches on support questions on non-wireless phones offerings. Phone may be referred in the question by their model/manufacture or brand name or by popular categories and/or characteristics (e.g., "cordless phones"). Whenever the model/manufacture or brand name is specified, parameter(s) will be set with this intent.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets. Answers should be content directed at customers who are looking for support on using non-wireless phones.

**Parameters:**

[Landline Phones Parameter on page 168](#)

**Standard Questions:**

[Non-Wireless Phone Support Standard Questions on page 209](#)

**Phone Equipment Accessory and Parts Support**

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 **Phone Equipment Accessory and Parts Support**

**Description:**

Matches on support questions on the company's phone equipment accessories and phone equipment parts. Accessories and Parts may be referred by their brand names ("jabra") or by popular categories (e.g., "headphones", charges, batteries, etc.). Whenever those appear in the question, parameter(s) will be set with this intent.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets.

**Parameters:**

[Telecom Accessories Parameter on page 170](#)

[Telecom Parts Parameter on page 170](#)

**Standard Questions:**

[Phone Equipment Accessory and Parts Support Standard Questions on page 218](#)

**Upgrade Phone**

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 **Upgrade Phone**

**Description:**

Matches on questions from customers looking to upgrade their existing phones. This intent does not match on questions around customers looking to add a phone (see Additional Line or Phone Request Support or Research for those questions).

**Configuration Recommendations:**

Answers should be content directed at customers who are looking for support on upgrading their phones, including implications to their plans and additional costs they would incur. Consider also providing content on popular and/or recently released models and on special offers or discounts.

**Parameters:**

[Cell Phones Parameter on page 167](#)

**Standard Questions:**

[Upgrade Phone Standard Questions on page 245](#)

**Unlock Phone Password Codes**

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 **Unlock Phone Password Codes**

**Description:**

Matches on support questions from customers looking for assistance on unlocking phone codes (PUK, PINs, etc.). This intent will not match on questions about online account, phone cards, calling cards or credit cards, and email/voicemail passwords (see other support intents for these questions).

**Configuration Recommendations:**

As this intent covers a myriad of phone password code support questions, consider providing content that covers all possible phone password related support information, including how to reset, change or remove password feature on phones.

**Parameters:**

n/a

**Standard Questions:**

[Unlock Phone Password Codes Standard Questions on page 243](#)

## Phone Equipment Documentation

[Product Support on page 125](#)



[Phone Equipment Support on page 139](#)



**Phone Equipment Documentation**

**Description:**

Matches on questions from customers looking for operational manuals and technical spec information on phone offerings.

**Configuration Recommendations:**

Answer configuration for this intent should be set based on the parameters that are returned, to provide the most optimal user experience. Also, use "parent" parameters to setup answers for the ancillary portlets and to setup more generic answers on how to retrieve phone documentation.

**Parameters:**

n/a

**Standard Questions:**

[Phone Equipment Documentation Standard Questions on page 220](#)

## Other Telco Services Support

[Product Support on page 125](#)



**Other Telco Services Support**

**Description:**

This intent is the parent intent for a collection of support intents around other services provided by the company. Note that this intent is strictly a parent intent and will be triggered every time a child intent is triggered and will not be triggered otherwise.

**Configuration Recommendations:**

Consider using this intent for setting secondary portlets or answers which are common to all its children intents. Otherwise, this intent should not be configured.

**Parameters:**

n/a


**Standard Questions:**

n/a

## International Calling Support

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 **Unlock Phone Password Codes**

**Description:**

Matches on support questions on the company's on making or receiving international calls, and making or receiving calls or using phones and services in foreign countries.

**Configuration Recommendations:**

As this intent covers a myriad of international services support questions, consider providing content that covers all possible internationally related information, including support for international features or components of plans, calling and receiving international calls, and using services internationally.

**Parameters:**

n/a

**Standard Questions:**

[International Calling Support Standard Questions on page 206](#)

## Calling Card Support

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 **Calling Card Support**

**Description:**

Matches on support questions on the company's calling card offerings, including applying, ordering and pricing, whether as part of the plan or as a separate service. Note that this intent will not match on support questions on prepaid phone card or credit card service offerings.

**Configuration Recommendations:**

Answers should be content directed at customers who are looking for support on calling cards and calling card features.

**Parameters:**

n/a

**Standard Questions:**

[Calling Card Support Standard Questions on page 192](#)

**Disabled Services Support**

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 **Disabled Services Support**

**Description:**

Matches on support questions on the company's phone services or service features for disabled customers, whether as part of a company's plans or not.

**Configuration Recommendations:**

Answers should be content directed at customers who are looking for support on the company's phone services and service features for the disabled.

**Parameters:**

n/a

**Standard Questions:**

n/a

**Directory Info Support**

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 **Directory Info Support**

**Description:**

Matches on questions about directory information or assistance services or that make use of directory information or assistance services.

**Configuration Recommendations:**

Answers should be content directed at how to use directory assistance services and the types of services that are available through them. Consider also providing links to directory assistance services tools and content which are available online.

**Parameters:**

n/a

**Standard Questions:**

[Directory Info Support Standard Questions on page 200](#)

**Number Portability Inquiry**

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 **Number Portability Inquiry**

**Description:**

Matches on questions on phone number portability for customers looking to moving to a new area or changing their cell phones.

**Configuration Recommendations:**

Answers should be content directed at both customers looking to take their number to a new address or take their number to a new cell phone. Matched questions may or may not be from existing customers, so consider providing promotional information for both instances on secondary portlets.

**Parameters:**

n/a

**Standard Questions:**

[Number Portability Inquiry Standard Questions on page 209](#)

**Area/Country Lookup**

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 **Area/Country Lookup**

**Description:**

Matches on questions from customers looking for area (including international) or country phone codes.

**Configuration Recommendations:**

Answers should be content directed at both customers looking for area codes (including international) and country codes. Also consider providing instructions for making long-distance and international calls.

**Parameters:**

n/a

**Standard Questions:**

[Area Or Country Lookup Standard Questions on page 180](#)

**Reverse Number Lookup**

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 **Reverse Number Lookup**

**Description:**

Matches on questions from customers looking to identify the person/company, given a phone number. It will also match on questions where the only text is a phone number

**Configuration Recommendations:**

Answers should be content directed at both customers looking to identify the owner of a phone number. If a query where the customer types only a phone number can potentially mean something other than this intent (e.g., when the phone number can also be an account number), consider providing additional information for those circumstances.

**Parameters:**

n/a

**Standard Questions:**

[Reverse Number Lookup Standard Questions on page 228](#)

**Telecom Product Ordering and Sales Support Intents**

The following hierarchy contains the Telecom Product Ordering and Sales Support Intents:

[Product Ordering and Sales Support on page 148](#)

 [Make Order on page 148](#)

 [Track Order on page 149](#)

 [Product Rebates Inquiry on page 149](#)



[Warranty Inquiry on page 150](#)



[Product Insurance Inquiry on page 150](#)

## Product Ordering and Sales Support

### **Description:**

Matches on questions on the company's product ordering and sales process. This intent is also designed to be default match for support questions on that process that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all product ordering and sales support processes. Also use this intent for both online and non-online purchasing options.

### **Parameters:**

n/a

### **Standard Questions:**

n/a

## Make Order

[Product Ordering and Sales Support on page 148](#)



**Make Order**

### **Description:**

Matches on questions from customers looking to order products and/or services, whether online or not. Also matches on questions around the process of ordering those products and services.

### **Configuration Recommendations:**

Answers should be content directed at customers who are ready to purchase a product or service. Also consider adding content for supporting the customer through the process of purchasing products and services.

### **Parameters:**

n/a

### **Standard Questions:**

[Make Order Standard Questions on page 208](#)



## Track Order

[Product Ordering and Sales Support on page 148](#)



### Track Order

#### **Description:**

Matches on questions from customers looking to find more about the status of their order (including shipping and delivery status).

#### **Configuration Recommendations:**

Answers should be content directed at customers who are looking to find out about the status of their orders. Also consider adding content for finding shipping and delivery information, including tools/links for tracking the order shipment.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Track Order Standard Questions on page 241](#)

## Product Rebates Inquiry

[Product Ordering and Sales Support on page 148](#)



### Product Rebates Inquiry

#### **Description:**

Matches on questions from customers looking to find more information on product rebates, including downloading rebate application forms, rebate credits status and rebates available.

#### **Configuration Recommendations:**

Answers should be content directed at customers who are looking to find out how to apply for rebates. Also include content on tracking rebate credits and how to download rebate forms.

#### **Parameters:**

[Telecom Products Parameter on page 170](#)

#### **Standard Questions:**

[Product Rebates Inquiry Standard Questions on page 225](#)

## Warranty Inquiry

[Product Ordering and Sales Support on page 148](#)



### Warranty Inquiry

#### **Description:**

Matches on questions from customers looking to find more information on product warranties, including the various warranty offerings available for a product, and how to use the warranty to repair, refund or replace previously purchased product.

#### **Configuration Recommendations:**

Answers should be content directed at customers who are looking to find more information on product warranties, including available offerings, how to make use of them, and the warranty details for a previously purchased product.

#### **Parameters:**

[Cell Phones Parameter on page 167](#)

#### **Standard Questions:**

n/a

## Product Insurance Inquiry

[Product Ordering and Sales Support on page 148](#)



### Product Insurance Inquiry

#### **Description:**

Matches on questions from customers looking to find more information on product insurance, including the various insurance offerings available for a product, and how to use the insurance to repair, refund or replace previously purchased product.

#### **Configuration Recommendations:**

Matches on questions from customers looking to find more information on product insurance, including the various insurance offerings available for a product, and how to use the insurance to repair, refund or replace previously purchased product.

#### **Parameters:**

[Telecom Products Parameter on page 170](#)

#### **Standard Questions:**

n/a

## Telecom Account Support Intents

The following hierarchy contains the Telecom Account Support Intents:

[Account Support on page 151](#)

└─ [Update Account Profile on page 151](#)

└─ [Close Account on page 152](#)

└─ [Account Information Inquiry on page 152](#)

└─ [Account Setup Support on page 153](#)

└─ [Account Sign In Help on page 153](#)

## Account Support

### **Description:**

Matches on support questions from customers looking for assistance in managing their accounts. This intent is also designed to be default match for support questions on account management that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all online account support services available. Also use this intent for setting general help and other support information, and guidelines for browsing through the account support pages.

### **Parameters:**

n/a

### **Standard Questions:**

[Account Support Standard Questions on page 178](#)

## Update Account Profile

[Account Support on page 151](#)

└─ **User Account Profile**

### **Description:**

Matches on support questions from customers looking to update their account information and/or preferences (e.g., address, email, etc.).

**Configuration Recommendations:**

Answer should be contents or links directed at customers looking to update their account profile. Consider also providing content that assists the customers through that process.

**Parameters:**

n/a

**Standard Questions:**

[Update Account Profile Standard Questions on page 243](#)

## Close Account

[Account Support on page 151](#)



**Close Account**

**Description:**

Matches on questions on customers who are looking to close their account(s). This intent will only match questions where the concept "account" has been identified. Another intent, Cancel Plan, will match questions where the term "plan" has been identified. This has been done in this manner for companies where these intents are considered different.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking to close their account(s). Also consider providing answers for customers who are only looking to terminate their billing account, or components of their plans/accounts. Also, consider keeping the content similar between this intent and "Cancel Plan", if both intents are considered to be the same.

**Parameters:**

n/a

**Standard Questions:**

[Close Account Standard Questions on page 194](#)

## Account Information Inquiry

[Account Support on page 151](#)



**Account Information Inquiry**

**Description:**

Matches on questions on customers who are looking information about their accounts, including confirming existing plans and services under contract, phone numbers, etc.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at customers who are looking for detail information on their account(s). Consider providing them with links to accessing their account information, service plan contracts in place, etc.

**Parameters:**

n/a

**Standard Questions:**

[Account Information Inquiry Standard Questions on page 173](#)

## Account Setup Support

[Account Support on page 151](#)

**Account Setup Support****Description:**

Matches on questions on customers who are looking to setup their accounts online. It also matches on customers looking for support during the process of opening up an online account.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at supporting the account setup process. Consider including links to web pages where the customer can open an account online (or an online account). Also consider adding links for customer needing sign in support in a secondary portlet.

**Parameters:**

n/a

**Standard Questions:**

[Account Setup Support Standard Questions on page 175](#)

## Account Sign In Help

[Account Support on page 151](#)

**Account Sign In Help****Description:**

Matches on questions on customers who are need help login in to their accounts, including errors in the sign-in process, password resets, etc.

**Configuration Recommendations:**

Answer configuration for this intent should be content directed at supporting the account sign in process. Consider including links to the sign up page or tool. Also consider adding links for customer looking to setup their accounts in a secondary portlet.

**Parameters:**

n/a

**Standard Questions:**

[Account Sign In Help Standard Questions on page 175](#)

## Telecom Customer Service Intents

The following hierarchy contains the Telecom Customer Service Intents:

[Customer Service Inquiry on page 154](#)

 [Contact Customer Service on page 155](#)

 [Schedule Service Appointment on page 155](#)

 [Escalate Customer Help on page 156](#)

 [Report Abuse/Fraud on page 156](#)

 [Report Network/Signal Problem on page 157](#)

 [Report Lost Phone on page 157](#)

## Customer Service Inquiry

**Description:**

Matches on support questions from customers looking for assistance from or information about the customer service department. This intent and its children do not match on questions specifically at getting product, account or billing support (see other intents for these). Rather, they are designed to match questions where the customer is looking to communicate to the customer department. This intent is also designed to be default match for support questions on customer services that do not have a more specific intent in place.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on communicating with Customer Services. Also use this intent for setting general help and other support information, and guidelines for browsing through the customer services pages.

**Parameters:**

n/a

**Standard Questions:**

[Customer Service Inquiry Standard Questions on page 198](#)

## Contact Customer Service

[Customer Service Inquiry on page 154](#)

**Contact Customer Service****Description:**

Matches on support questions from customers looking to contact customer services through available communication channels (email, chat, phone, etc.)

**Configuration Recommendations:**

Answer configuration for this intent should be to provide all available means for communicating with customer services. Consider also providing information in contacting other departments (e.g. billing, system administration). Also consider re-displaying the available self-services tools and support content information.

**Parameters:**

n/a

**Standard Questions:**

[Contact Customer Service Standard Questions on page 196](#)

## Schedule Service Appointment

[Customer Service Inquiry on page 154](#)

**Schedule Service Appointment****Description:**

Matches on support questions from customers looking to schedule service appointments and/or make changes to them.

**Configuration Recommendations:**

Answer configuration for this intent should be to present them with information or tools for scheduling service visits. If available, it should also include information on accessing their appointments or making changes (online or otherwise).

**Parameters:**

n/a

**Standard Questions:**

[Schedule Service Appointment Standard Questions on page 231](#)

## Escalate Customer Help

[Customer Service Inquiry on page 154](#)



### Escalate Customer Help

#### **Description:**

Matches on questions where the customer is looking to escalate an issue within customer services. It also matches on questions that were deemed to require intervention by a customer services representative (e.g, customer identified as frustrated or unhappy with the services they have received online or otherwise).

#### **Configuration Recommendations:**

Answers configuration for this intent should be to provide the means for customers to reach a live representative or to provide them with an escalation vehicle or tool. Carefully consider ensuring that the content presented is appropriate with the state of mind of the customer and that the customer is not presented with content that may be interpreted as uncaring and/or ineffective.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Escalate Customer Help Standard Questions on page 203](#)

## Report Abuse/Fraud

[Customer Service Inquiry on page 154](#)



### Report Abuse/Fraud

#### **Description:**

Matches on questions where the customer is looking for assistance with or reporting fraudulent or abusive use of their services or account.

#### **Configuration Recommendations:**

Answers configuration for this intent should be to provide instructions or content for reporting or dealing with these cases. Consider also ways in which to identify the different types of fraudulent/abusive usage.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Report Abuse Or Fraud Standard Questions on page 226](#)



## Report Network/Signal Problem

[Customer Service Inquiry on page 154](#)



### Report Network/Signal Problem

#### **Description:**

Matches on questions where the customer has identified problems with their service reception, network issues, or dead/intermittent signal problems and would like to report them or find out more about the status of these issues.

#### **Configuration Recommendations:**

Answers configuration for this intent should be to provide instructions or content for reporting or dealing with these cases. Consider also , if available, providing links to the latest or current information on previously identified network outages or issues.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Report Network Or Signal Problem Standard Questions on page 227](#)

## Report Lost Phone

[Customer Service Inquiry on page 154](#)



### Report Lost Phone

#### **Description:**

Matches on questions where the customer has identified problems with their service reception, network issues, or dead/intermittent signal problems and would like to report them or find out more about the status of these issues.

#### **Configuration Recommendations:**

Answers configuration for this intent should be to provide instructions or content for reporting or dealing with these cases. Consider also , if available, providing links to the latest or current information on previously identified network outages or issues.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Report Lost Phone Standard Questions on page 227](#)

## Telecom Billing and Support Intents

The following hierarchy contains the Telecom Billing and Support Intents:

[Billing and Support Inquiry on page 158](#)

└─ [Payment Options and Payment Support on page 159](#)

└─ [Dispute Bill on page 159](#)

└─ [Balance Inquiry on page 160](#)

└─ [View Bill Details on page 160](#)

└─ [Understanding a Bill on page 161](#)

└─ [Request Bill Copy on page 161](#)

└─ [Billing Refund Inquiry on page 162](#)

## Billing and Support Inquiry

### **Description:**

Matches on support questions from customers looking for assistance in managing their accounts. This intent is also designed to be default match for support questions on account management that do not have a more specific intent in place.

### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on all online account support services available. Also use this intent for setting general help and other support information, and guidelines for browsing through the account support pages.

### **Parameters:**

n/a

### **Standard Questions:**

[Billing and Support Inquiry Standard Questions on page 184](#)

## Payment Options and Payment Support

[Billing and Support Inquiry on page 158](#)



### Payment Options and Payment Support

#### **Description:**

Matches on support questions from customers looking for assistance in making payments and/or changing and verifying their payment schedule or options.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on available options, how to configure/ manage their payment schedules, and how to make payments using these options. Consider including additional customer service contact information should the customer need further assistance with their questions.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Payment Options and Payment Support Standard Questions on page 210](#)

## Dispute Bill

[Billing and Support Inquiry on page 158](#)



### Dispute Bill

#### **Description:**

Matches on questions from customers who are disputing the charges or believe there are discrepancies on their bills.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on the process for disputing a billing charge and/or reporting discrepancies on their bills. Consider providing content describing how to read a bill, and the explanation for the different fees and charges.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Dispute Bill Standard Questions on page 200](#)

## Balance Inquiry

[Billing and Support Inquiry on page 158](#)



### Balance Inquiry

#### **Description:**

Matches on questions from customers who are looking to find the current balance on their account. This intent does not match on questions on view or understanding a bill or looking for a copy of a current bill (see other intents for these questions).

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide links for online accessing the balance on their accounts. Consider providing links for setting up for a online account and for signing in to an existing account. If possible, use the profile information to automatically provide the balance, if the customer has already logged in.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Balance Inquiry Standard Questions on page 180](#)

## View Bill Details

[Billing and Support Inquiry on page 158](#)



### View Bill Details

#### **Description:**

Matches on questions from customers who are looking to view the details of a current bill, including the different credits, fees and charges. This intent will not match on questions about understanding the bill, checking the current balance or disputing a bill (see other intents for those questions).

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide links for online accessing the bill details linked to their accounts. Consider providing links for setting up for a online account and for signing in to an existing account, so they can view the bill online. If possible, use the profile information to automatically bring up the bill details, if the customer has already logged in.

#### **Parameters:**

n/a

#### **Standard Questions:**

[View Bill Details Standard Questions on page 245](#)

## Understanding a Bill

[Billing and Support Inquiry on page 158](#)



### Understanding a Bill

#### **Description:**

Matches on questions from customers who are looking to understanding the details of a bill, including the different credits, fees and charges. This intent will not match on questions about viewing the bill or disputing a bill (see other intents for those questions).

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on how to read a bill, and the explanation for the different fees and charges. Also consider adding information to the process for disputing a billing charge and/or reporting discrepancies on their bills.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Understanding a Bill Standard Questions on page 241](#)

## Request Bill Copy

[Billing and Support Inquiry on page 158](#)



### Request Bill Copy

#### **Description:**

Matches on questions from customers who are looking for a copy of their current or previous bills.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on how to request for a copy of a current or a previous bill. Consider also providing links and/or instructions to view a current or previous bill online.

#### **Parameters:**

n/a

#### **Standard Questions:**

[Request Bill Copy Standard Questions on page 227](#)

## Billing Refund Inquiry

[Billing and Support Inquiry on page 158](#)



### Billing Refund Inquiry

#### **Description:**

Matches on questions from customers who are looking for a status on receiving a refund or credit or how to apply for a refund or credit.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide information on how to request for a copy of a current or a previous bill. Consider also providing links and/or instructions on the process for disputing a billing charge and/or reporting discrepancies on their bills

#### **Parameters:**

n/a

#### **Standard Questions:**

[Billing Refund Inquiry Standard Questions on page 187](#)

## Telecom General Company Inquiry Intents

The following hierarchy contains the Telecom General Company Inquiry Intents:

[General Company Inquiry on page 162](#)



[Office Location Inquiry on page 163](#)



[Job Employment Inquiry on page 163](#)



[Privacy Inquiry on page 164](#)



[Company Business Hours Inquiry on page 164](#)

## General Company Inquiry

#### **Description:**

Matches on questions from customers looking for general corporate information about the company (rather than products or services). This intent is also designed to be default match for questions on the company that do not have a more specific intent in place.

#### **Configuration Recommendations:**

Answer configuration for this intent should be to provide top level information (or links) on the company (e.g., location, management, contact information, investor relations, human resources, partners and affiliates, etc.).

Also use this intent for setting general help and other support information, and guidelines for browsing through these pages.

**Parameters:**

[Your Company Name Parameter on page 172](#)

**Standard Questions:**

[General Company Inquiry Standard Questions on page 203](#)

## Office Location Inquiry

[General Company Inquiry on page 162](#)

**Office Location Inquiry****Description:**

Matches on questions from customers looking for location information on the company's offices, branches, stores or dealerships.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide tools or content for locating the company's various offices, branches, dealership and/or stores. Consider also providing links for other important addresses and phone numbers.

**Parameters:**

n/a

**Standard Questions:**

[Office Location Inquiry Standard Questions on page 210](#)

## Job Employment Inquiry

[General Company Inquiry on page 162](#)

**Job Employment Inquiry****Description:**

Matches on questions from individuals looking for employment information or looking to apply for a job opening.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide links or tools for employment information or the job application process. Consider providing links to job openings descriptions and to general information on recruiting and/or human resources.

**Parameters:**

n/a

**Standard Questions:**[Job Employment Inquiry Standard Questions on page 208](#)

## Privacy Inquiry

[General Company Inquiry on page 162](#)**Privacy Inquiry****Description:**

Matches on questions from individuals looking for information on the company's policies around data privacy and security. This intent does not match to product related privacy questions (e.g., caller id, unlisted phone numbers). See other intents for those questions.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide information around the company's policies for safeguarding customer information and protecting the privacy of their customers. Consider also providing content around the company's position around using customer information for marketing purposes and processes for opting out from these programs.

**Parameters:**

n/a

**Standard Questions:**[Privacy Inquiry Standard Questions on page 225](#)

## Company Business Hours Inquiry

[General Company Inquiry on page 162](#)**Company Business Hours Inquiry****Description:**

Matches on questions from individuals looking for company's business hours (including those from specific departments, such as billing and customer services).

**Configuration Recommendations:**

Answer configuration for this intent should be to provide business hours information (workdays, weekends, holidays) for the company and all relevant departments. Consider also adding contact information and the various ways/means available for getting support and services.



**Parameters:**

n/a

**Standard Questions:**[Company Business Hours Inquiry Standard Questions on page 196](#)

## Telecom Website Inquiry Intents

The following hierarchy contains the Telecom Website Inquiry Intents:

[Website Inquiry on page 165](#) [Website Spanish Language Support on page 165](#) [Website Sitemap Inquiry on page 166](#)

## Website Inquiry

**Description:**

Matches on questions from customers looking for general assistance with using the company website. It will not match questions from customers looking for support on using the company products and services (e.g., account sign in, company network & connectivity issues, internet services support). See other intents for those questions. This intent is also designed to be default match for questions on the website that do not have a more specific intent in place.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide top-level information around how to use the company's website and to deal with the most common errors encountered in using the website. Consider including sign-in help information and other online transactional support content for the more frequent questions (e.g., online banking, online payment, etc.) as content on secondary portlets. Also consider providing information for internet services support, in case the customer is not referring to the company's website (but errors/problems with accessing other websites through the company's internet services).

**Parameters:**

n/a

## Website Spanish Language Support

[Website Inquiry on page 165](#) **Website Spanish Language Support****Description:**

Matches on questions from customers looking for spanish content or support on the website. It will not match on questions around products or service plans supporting spanish. See other intents for those questions.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide links or information on obtaining spanish content or support, whether available on the website or other channels.

**Parameters:**

n/a

**Standard Questions:**

[Website Spanish Language Support Standard Questions on page 249](#)

## Website Sitemap Inquiry

[Website Inquiry on page 165](#)

**Website Sitemap Inquiry****Description:**

Matches on questions from customers looking a map of the website. This intent matches only questions where the customer explicitly asked for the website map and not for the specific location of a particular content set.

**Configuration Recommendations:**

Answer configuration for this intent should be to provide links to the site map.

**Parameters:**

n/a

## Telecom Intent Parameters

The following parameters are used within the Automotive intents:

[Call Services Parameter on page 167](#)

[Cell Phones Parameter on page 167](#)

[Internet Services Parameter on page 167](#)

[Internet Plans Parameter on page 168](#)

[Landline Phones Parameter on page 168](#)

[Pay As You Go Plans Parameter on page 168](#)

[PDA Parameter on page 169](#)

[Personalized Content Parameter on page 169](#)

[Prepaid Phone Cards Parameter on page 169](#)

[Telecom Accessories Parameter on page 170](#)

[Telecom Parts Parameter on page 170](#)

[Telecom Products Parameter on page 170](#)

[Your Company Name Parameter on page 172](#)

## Call Services Parameter

### **Used In:**

[Call Services Research \(including Star Keys\) on page 116](#)

[Call Services Support \(Star Keys\) on page 137](#)

### **Description:**

Names of calling services and features offered with the company's service plans.

### **Root Concept:**

noun.telecom:call\_service

## Cell Phones Parameter

### **Used In:**

[Upgrade Phone on page 142](#)

[Warranty Inquiry on page 150](#)

[Wireless Phone Research on page 119](#)

[Wireless Phone Support on page 139](#)

### **Description:**

Names of cell phones offered or supported by the company.

### **Root Concept:**

noun.artifact:cellular\_telephone

## Internet Services Parameter

### **Used In:**

[Internet Services Research on page 109](#)

[Internet Services Support on page 126](#)

### **Description:**

Names of internet services provided by the company and typical industry names.

**Root Concept:**

noun.telecom:product

## Internet Plans Parameter

**Used In:**

[Internet Services Research](#) on page 109

[Internet Services Support](#) on page 126

**Description:**

Names of internet services provided by the company and typical industry names.

**Root Concept:**

noun.telecom:internet\_service

noun.telecom:internet\_plan

## Landline Phones Parameter

**Used In:**

[Non-Wireless Phone Research](#) on page 120

[Non-Wireless Phone Support](#) on page 141

**Description:**

Names of non-wireless phones offered or supported by the company.

**Root Concept:**

noun.telecom:landline\_telephone

## Pay As You Go Plans Parameter

**Used In:**

[Prepaid Services Support](#) on page 127

**Description:**

Names of pay-as-you-go plans.

**Root Concept:**

noun.telecom:pay\_as\_you\_go

## PDA Parameter

**Used In:**

[PDA Research on page 120](#)

PDA Support <Intent tbd>

**Description:**

Names of PDA products.

**Root Concept:**

noun.customerhelp:PDA

## Personalized Content Parameter

**Used In:**

[Personalization and Content Management Research on page 114](#)

[Personalization and Content Management Support on page 134](#)

**Description:**

Names of personalized content services and/or features offered by the company.

**Root Concept:**

noun.telecom:personalized\_content

## Prepaid Phone Cards Parameter

**Used In:**

[Prepaid Services Support on page 127](#)

**Description:**

Names of prepaid phone cards.

**Root Concept:**

noun.telecom.technical:prepaid\_phone\_card

## Telecom Accessories Parameter

### **Used In:**

[Phone Equipment Accessory and Parts Research on page 121](#)

[Phone Equipment Accessory and Parts Support on page 141](#)

### **Description:**

Names of phone accessories and common brand names available.

### **Root Concept:**

noun.telecom:accessory

## Telecom Parts Parameter

### **Used In:**

[Phone Equipment Accessory and Parts Research on page 121](#)

[Phone Equipment Accessory and Parts Support on page 141](#)

### **Description:**

Names of phone parts and common brand names available.

### **Root Concept:**

noun.telecom:phone\_part

## Telecom Products Parameter

### **Used In:**

[Product Insurance Inquiry on page 150](#)

[Product Rebates Inquiry on page 149](#)

[Product Support on page 125](#)

### **Description:**

The range of products offered by the company.

### **Root Concept:**

noun.telecom:product

## Telecom Service Plans Parameter

### **Used In:**

[Service Plan Research](#) on page 109

[Service Plan Support](#) on page 126

### **Description:**

Names of company's phone service plans and typical industry names.

### **Root Concept:**

noun.telecom:calling\_plan

## Telecom Service Providers Parameter

### **Used In:**

[Change Service Providers](#) on page 128

### **Description:**

Names of companies offering telecom products.

### **Root Concept:**

noun.telecom:service\_provider

## Telephones Parameter

### **Used In:**

[Phone Equipment Research](#) on page 118

[Phone Equipment Support](#) on page 139

### **Description:**

Parent concept for all phones.

### **Root Concept:**

noun.artifact:telephone

## Your Company Name Parameter

### **Used In:**

[General Company Inquiry](#) on page 162

### **Description:**

The name of the company and its associated synonyms.

### **Root Concept:**

noun.telecom:Your\_Company\_Name

## Telecom Standard Test Questions

The following sections list the questions used to test the various Telecom Application Intents.



## Account Information Inquiry Standard Questions

[Account Support on page 151](#)



[Account Information Inquiry on page 152](#)

### Standard Questions

e-mail address i enter does not match the address on my account

unable to log onto account

how do i check who my long distance carrier is

how do i get my user id?

it wont accept the user id

i enter my phone number for user id and system says it dose not match records

i have resey my password x 2 and cannot access my account please advise i n

i do not have an account

i do not remember what my user id was

how can i start a new account

i entered my home phone as the user id

dsl account

where can i find my account number

i can not set my password or id number for my account

how can i talk to a real person about my account?

how do i add my wireless account to online billpay?

still can not access my account

how do i create my account

how can i access my on-hold account

nothing is matching the orignal account

can you describe my account to me?

how can i verify my accounts

old account

id like to cancal this account

how do i change the responsible party on this account?

puerto rico is not accepted to set my account

online registration won,t accept my bank account number . why?

i am not able to sign on to review my account.

i need the amount past due on my account

will not except user id which is my phone number

i using user id and is doesen work

where do i find e-mail address on this account

how can i check to see if my account has a calling card

forgot user id

why cant iaccess my account

---

how do i e-mail accounts management

---

what e-mail address do you have for our account?

---

my account

---

how can i register to see my account

---

how do i view all phone numbers activity on my account

---

my occount

---

how do i go to my account

---

who do i contact to get a copy of all the activity done on this account as of date of purchase.

---

another account

---

second account

---

## Account Setup Support Standard Questions

[Account Support on page 151](#)



[Account Setup Support on page 153](#)

### Standard Questions

my password i established when i set up my online account doesn't work.

i signed up for service, but need to pay a deposit, i have not received the

how can i start a new account

can i sign up for home phone service i would like to switch carriers

tried to set up account on line would not except, why?

i did not sign up for the int'l savings plan. how do i get it removed?

how do i create my account

am i signed up for auto pay thru my checking acct?

how can i set up a new online account? i

create an on line account for first time user

i want to sign up a local line

how do i sign up for a calling card ?

setting up on line account

set up my online account

how do i get registered?

how can i register to see my account

## Account Sign In Help Standard Questions

[Account Support on page 151](#)



[Account Sign In Help on page 153](#)

### Standard Questions

i can't access my long distance bill with my current user id and password

not accepting my phone number

i just need my login and password please

system doesn't recognize my phone number or email address, so i can't login

can u help me with my password

how do i change my login script from my old number to my new number

my password is not working

log in keeps failing

how do i get my user id?

how do i logon to pay my bill

i can't get to my account to pay my internet service bill

it wont accept the user id  
why is my phone number not accepted  
i enter my phone number for user id and system says it dose not match records  
how do i find my pin  
i dont know my plan or password, i need to access on line.  
i have resey my password x 2 and cannot access my account please advise i n  
nor can i reset my password  
i do not remember what my user id was  
my password i established when i set up my online account doesn't work.  
how\do i reset password  
cant remember my wifes new cell phone number can you help  
do not remember password  
fix password  
why doesn't my tempory password work?  
why can't log on to pay my bill  
i am unable to reset my password. please help  
can you help with my password  
i cannot login  
i cant get my new phone number  
what if i forgot my log on?-not password  
how do i change my home phone number  
i can not set my password or id number for my account  
my phone number is not working with my password.  
still can not access my account  
i need a new password and user id  
why cant i reset my pass word  
i forgot my password and email  
i cant log on  
how can i access my on-hold account  
why can't i log in?  
i don't have a password. i'm not registerd to pay my bill online yet  
why can i not sign in  
need help logging in-  
when i try and log in the system keeps saying my phone number is wrong, why  
forgot phone pin number  
how do i change the phone number  
need help with my password  
password is invalid and i need to update my email address  
they never gave me a password for online i need to check how many min. i ha  
i have never been able to log on. my e-mail address is febbecke@hotmail.co  
i still cant reset my password.  
can you help with my password

---

i have tried and it will not accept my phone number

---

why wont the password reset page register the new password that i entered

---

i reset my password, are you going to email me a new one?

---

have completed all the password info. why can't i view bill?

---

can youn help me with my password?

---

i am not able to sign on to review my account.

---

log in help won't let me reset my password

---

will not except user id which is my phone number

---

cannot find password

---

can't log in

---

how do i get my password

---

my login and password are not working.

---

i forgot my password and it won't accept my phone number to reset it

---

why is my phone number not my password?

---

i do not know my password or email address that was used

---

i can not log in

---

forgot user id

---

how do we sign in ?

---

why cant i access my account

---

how do i reset my password

---

i forgot my phone number can you give it to me

---

what is the phone number for repair service?

---

your site will not allow me to reset my password

---

why cant i log on

---

how do i get my password

---

the password you sent doesn't work.

---

513-678-7777

---

log in with different phone number?

---

log in

---

change password

---

i am in ireland and have a signal but cannot get through to any phone number - local ireland nor us - how shouls i be dialling?

---

6173317777

---

how do i reset my log in

---

set up a password

---

how do i reset a password that i forgot

---

my password wont enter

---

i'm trying to set up my voice mail a/c. when i get connected they do not prompt me to set anything up, just ask for the ten digit phone number of the person i'm trying to reach. help!

---

log in by name

---

password will not work

---

## Account Support Standard Questions

[Account Support on page 151](#)

### Standard Questions

account setting

e-mail address i enter does not match the address on my account

unable to log onto account

i have resey my password x 2 and cannot access my account please advise i n

i do not have an account

my password i established when i set up my online account doesn't work.

how can i start a new account

trying to update account,phone no no recogonized ?

tried to set up account on line would not except, why?

why is when i go to set and account it don't want me to

how do i add my wireless account to online billpay?

still can not access my account

how do i create my account

how can i set up a new online account? i

changed account number

updated e-mail address: d2453@mydomain.com

how can i verify my accounts

remove my email address i don't have an account with you anymore

how do i change the responsible party on this account?

puerto rico is not accepted to set my account

how do i change the account name?

setting up on line account

i nedd to check my account status online and does not let me do it?

why cant iaccess my account

set up my online account

how do i e-mail accounts management

how can i register to see my account

how do i change name on phone account

how do i go to my account

## Additional Line or Phone Request Research Standard Questions

[Product Research on page 108](#)



[Additional Line or Phone Request Research on page 118](#)

**Standard Questions:**

|                                                                                                         |
|---------------------------------------------------------------------------------------------------------|
| what is rate for second line?                                                                           |
| adding phone number                                                                                     |
| additional line                                                                                         |
| how much will it cost for an additional telephone line?                                                 |
| two lines                                                                                               |
| add new telephone number for home                                                                       |
| how much would adding a second line cost me                                                             |
| 2nd line                                                                                                |
| can i add a second phone to my account?                                                                 |
| how about if i want two camera phones                                                                   |
| have two lines but only want one                                                                        |
| can i have a different name on a second line?                                                           |
| can i get another free phone                                                                            |
| can i add a phone to my plan?                                                                           |
| how to get another phone if you are a current customer?                                                 |
| one phone two lines                                                                                     |
| we have a t-mobil family plan which will be end in this sept. may we add one more line to our plan now? |
| add an additional phone to plan                                                                         |
| can i use a number from another phone                                                                   |
| check usage of 2nd line                                                                                 |
| can i add an additional phone to my account                                                             |
| i need to view billing for the second phone on my account, how can i?                                   |
| can i add a line to my moms contract and still get the nokia6800 for free                               |
| two phone lines in one account how do i check the bill on both?                                         |
| how do i recieve wallpapers from another phone                                                          |
| how do i add a new phone to my account?                                                                 |
| how do i purchase another phone?                                                                        |

**Additional Line or Phone Request Support Standard Questions**

[Product Support on page 125](#)



[Additional Line or Phone Request Support on page 138](#)

**Standard Questions**

|                                                          |
|----------------------------------------------------------|
| how can i hook up a second phone line?                   |
| how do i add an additional line to my long distance bill |
| how do i add a second line to my auto pay                |

## Area Or Country Lookup Standard Questions

*Product Support on page 125*

 *Other Telco Services Support on page 143*

 *Area/Country Lookup on page 146*

### Standard Questions

area code

i need the city code for salamanca spain

area code availability

## Balance Inquiry Standard Questions

*Billing and Support Inquiry on page 158*

 *Balance Inquiry on page 160*

### Standard Questions

i received my bill after you took out the payment.

i want to view my bill online. i did everything.

i do not receive paper bill even then i can not view my bill online

no billing detail shows on screen?

about my bill

i think this is the wrong bill you sent me, i received this one last month

get a copy of a past bill

i can't check my bills online

why can't my online bill be viewed at this time?

i simply want to view my bill - 844 360

how can i see my cell phone bill online?

when is my next bill due, and how much will it be

how do change my billing back to mailed

i want to view my bill for our shop

how do i cancel online billing?

phone bill

i was billed the right amount the first month, but then it went up. why?

how much is my august bill

please return to paper billing. i can't get online. i forgot everyth

i enrolled in the online payments and cannot view my bill, why?

can you tell me exactly how much my bill is for this month?

i want to view my bill. what must i do?



check status bill payments with visa  
i already cancelled several weeks ago and received a bill. why?  
always received email notice for bill until this month. why?  
i do not have an e-mail and i want to know my balance  
change to paper billing  
can you disconnect this service and forward the bill?  
bill from 1997  
i am not your customer! why am i getting bills???  
what is my bill balance  
change billing date  
i click on "view bill" but it does not appear  
i changed my plan but my bill appears t o be getting higher  
need to talk to some one about billing problem?  
why am i still being billed ?  
paper bill?  
my view bill page shows no numbers called, yet the bill was for \$85.56.  
when i view my bill it does no list the calls that i made  
i am wondering how my bill is so high. can i get a copy of the last three b  
can i go back to mailed bills?  
old bills  
records indicate i am not a customer, why do i keep getting a bill?  
my current bill, listing calls made, does not appear.  
how do i stop getting a bill for services i never had?  
how can i view my phone bill  
did not get a bill  
i have a mistake in my bill  
why am i recvinng a bill i do not have long dist  
at 10 cents a minute and the minum is \$7.00 does my bill gets higher each  
i did not receive a paper bill. why the online bill in incudes statements?  
how do i receive a paper bill?  
i want to view my current bill  
view my bill online  
view my go phone bill  
i don't want to view my bill i need help  
how do i recieve my bill in the mail  
i want to question a charge on my bill for a call to 425-635-2222.  
can i review old bills ?  
due date  
can i see my bill?  
trying to view my phone bill online  
i would like to view my phone bill on line  
what is my current balance due?

why will the system not let me view the numbers on my bill?

negative balance on bill

i click on view bill but no billing information comes up

i should be on online billing

i do not have a bill yet.

can i read my phone bill on line

what is the minimum due on my bill?

how can i block my account to not allow ld charges on my bill

how do i cancel on-line billing?

i can not view my bill details on line

where is my bill for june 26-july25?

how to check your balance

i need to view billing for the second phone on my account, how can i?

post new bill

bill balance

my phone bill

need phone number to billing

last bill before chainge number

where is my total amount due?

current balance

two phone lines in one account how do i check the bill on both?

when is my monthly billing cycle

bill questions

see billing for entire account

when is my due date

is there a way that i can check my final bill?

view my bill

where is my bill from 01/10/05 to 02/08/05

i want to pay my bill online, but i have a family plan with three phones and i can only see the billing for my phone.

current bill

i would like to see my last bill, since it was never available everytime i logged on.

no bill

im looking for my total bill

how to find bill on phone

monthly amount due bil

need to view bill from oct. 2004

how do i know when is my new bill cycle for each month

february bill

my current bill activity

i need to see the entire bill including the amount for 2034348452. it is the same account number though.

amount of bill

---

invoice for december bill

---

view previous bill

---

last bill

---

checking the balance

---

## Billing and Support Inquiry Standard Questions

*Billing and Support Inquiry on page 158*

### Standard Questions

i can't access my long distance bill with my current user id and passwork

i received my bill after you took out the payment.

i want to view my bill online. i did everything.

if i'm not on view and pay can i still view my bill

i do not receive paper bill even then i can not view my bill online

no billing detail shows on screen?

i think this is the wrong bill you sent me, i received this one last month

i can't check my bills online

why can't my online bill be viewed at this time?

i simply want to view my bill - 804 360

switch autopay to view-n-pay

when is my next bill due, and how much will it be

i want to view my bill for our shop

i would like to see the charges for the aug 10th statement

am i going to see more charges from my current service provider?

i signed up for service, but need to pay a deposit, i have not received the

i entered my account and routing number but system won't allow payment

i enrolled in the online payments and cannot view my bill, why?

i have a call on my bill i didnt make

i want to view my bill. what must i do?

check status bill payments with visa

i already cancelled several weeks ago and received a bill. why?

always received email notice for bill until this month. why?

i want to make a call and charge it to my phone

what was i charged for my international call last night?

who do i call to pay my bill over the phone

how do i dispute a long distance call charged to me?

change billing date

i click on "view bill" but it does not appear

i got charged twice

payment was received. long distance is still blocked.

need to talk to some one about billing problem?

once registered do i still receive a bill by mail?

i have long distance calls on my bill that don't belong to me how do you co

calls charged for not made

i have a question about my bill would please give me the number to contact

am i signed up for auto pay thru my checking acct?

my view bill page shows no numbers called, yet the bill was for \$85.56.

connectivity charges

when i view my bill it does no list the calls that i made

my current bill, listing calls made, does not appear.

how can i view my phone bill

can i choose a date for online payment

what is the \$5.00 one time phone charge

i did not receive a paper bill. why the online bill in incudes statements?

how do i receive a paper bill?

how can i check the status of payment made via an 800 number

i want to view my current bill

view my bill online

view my go phone bill

i don't want to view my bill i need help

how do i recieve my bill in the mail

my payment doesn't show as paid

i want to question a charge on my bill for a call to 425-635-7777.

can i review old bills ?

why is my online bill showing a diffent balance from my bill they mail to

calling card that is on my bill

usage fee

billing phone number

how can i view my cell phone bill?

trying to view my phone bill online

can you please send me another paper bill for the charges due in july 2004?

why won't my bill come up for me to view?

i would like to view my phone bill on line

have completed all the password info. why can't i view bill?

why will the system not let me view the numbers on my bill?

i click on view bill but no billing information comes up

i cancelled my service and i am being charged

cancelation fees

i want to see my current charges

why did i not receive a bill this month

i am trying to view my current bill and every time i click on that option i

what is the minimum due on my bill?

how do i pay my installation charge in installments?

it shows that you're unable to retrieve my bill

how can i block my account to not allow ld charges on my bill

i need help understanding a charge on my longdistance bill?

ordered \$.07 plan being charged \$.09

---

is there a michigan eucl charge

---

i can not view my bill details on line

---

i have call on my bill that i donot make , the call were to ny.

---

view previous ststatement

---

i need to view billing for the second phone on my account, how can i?

---

need phone number to billing

---

last bill before chainge number

---

are your customers charged for making 411

---

is there roaming charges?

---

what is the phone number for this jamster, jamba crap i am being billed for?

---

two phone lines in one account how do i check the bill on both?

---

when is my monthly billing cycle

---

exolain taxes and surcharges

---

what extra fees are applied each month with my bill ?

---

when will by easypay be taken from my checking account?

---

what us pending charges and credits

---

is there a way that i can check my final bill?

---

view my bill

---

receive international charge

---

what number do i dial on my mobile phone to pay my bill

---

can i switch from one plan to another without being charged a termination fee.

---

charges for the end of january

---

if i use my phone in another state do i get charged roming charges

---

need to view bill from oct. 2004

---

what is usage charges?

---

how do i know when is my new bill cycle for each month

---

i need to see the entire bill including the amount for 2034377772. it is the same account number though.

---

view previous bill

---

how can i pay for my bill on line when my number is cancelled i'm over seas

---

## Billing Refund Inquiry Standard Questions

*Billing and Support Inquiry on page 158*

 *Billing Refund Inquiry on page 162*

### Standard Questions

how to send check to me for credit balance

will you let me know how soon i can expect a credit on former service.

refund?

call credit

how do i get credit

dropped call credit

credit for dropped call


how do i get credits

can you check my credit

## Call Block Research Standard Questions

*Product Research on page 108*

 *Service Feature Research on page 110*

 *Call Services Research (including Star Keys) on page 116*

 *Call Block Research on page 117*

### Standard Questions

how to block long distance calls

i need to put a callers block on long distance calls going out on my phone

wher do i put in the numbers for call block

is there any way to find out what blocked numbers are

block ayour own number

## Call Block Support Standard Questions

*Product Support on page 125*

 *Service Feature Support on page 131*

 *Call Services Support (Star Keys) on page 137*

 *Call Block Support on page 137*

## Standard Questions

how do i block offensive calls

how do i activate anonymous call rejection?

can i block certain phone numbers so they are not called from my home?

how do i block numbers

how do i unblock my number?

how do you block a number?


how do i block calls from an international number

how do you block incoming calls?

## Call Services Research Standard Questions

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Call Services Research \(including Star Keys\) on page 116](#)

## Standard Questions

can i get features like call waiting?

monthly cost for caller id service

directions for call forward

call return

you guys owe me about 72.00\$. when will you send me a check?

what is the call screening access code

wher do i put in the numbers for call block

forward call

## Call Services Support Standard Questions

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Service Plan Minutes Support on page 136](#)

 [Call Services Support \(Star Keys\) on page 137](#)

## Standard Questions

how do i use call forwarding

how do i activate nmy call forwarding option?

how can i use 3 way calling, i dont know how to use it.



---

i no longer have your internet or the 3-way calling options.

---

how do i use the call forwarding feature on my phone?

---

how do i get me caller id to work

---

why wouldn't my caller id be working

---

how do i get caller id

---

how much does it cost to add caller id

---

what number do i use to set up call forwarding

---

how does call forward work

---

## Caller ID Research Standard Questions

[Product Research on page 108](#)

☐ [Service Feature Research on page 110](#)

☐ [Call Services Research \(including Star Keys\) on page 116](#)

☐ [Caller ID Research on page 117](#)

### Standard Questions

monthly cost for caller id service

what is the call screening access code

## Caller ID Support Standard Questions

[Product Support on page 125](#)

☐ [Service Feature Support on page 131](#)

☐ [Call Services Support \(Star Keys\) on page 137](#)

☐ [Caller ID Support on page 138](#)

### Standard Questions

how do i get me caller id to work

why wouldn't my caller id be working

how do i get caller id

how much does it cost to add caller id

## Calling Areas And Coverage Research Standard Questions

[Product Research on page 108](#)

☐ [Service Feature Research on page 110](#)

☐ [Calling Areas / Coverage Research on page 112](#)

### Standard Questions

hr. for customer service in oh

what national coverage i have?

lynchburg va in service area?

coverage for alaska

coverage maps

---

can i use my phone in las vegas?

---

what frequency for local coverage

---

personal coverage

---

what is digital coverage

---

## Calling Card Research Standard Questions

[Product Research on page 108](#)

 [Other Telco Services Research on page 122](#)

 [Calling Card Research on page 123](#)

### Standard Questions

apply for a calling card

calling card rates call origin latvia

calling card that is on my bill

do you have calling card for international calls?

calling cards

## Calling Card Support Standard Questions

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 [Calling Card Support on page 144](#)

### Standard Questions

what calls are on my calling card?

i lost my calling card password

how do i order a calling card

how can i get a calling card?

how do i sighn up fo a calling card ?

how can i check to see if my account has a calling card

lost calling card

how do you activate a cell phone with a calling card?

## Camera Phone Research Standard Questions

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 [Wireless Phone Research on page 119](#)

 [Camera Phone Research on page 119](#)

## Standard Questions

picture phones

how about if i want two camera phones

cameras

cf62t camera attachment

let me see camera phones

wifi phone camera

## Camera Phone Support Standard Questions

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 [Wireless Phone Support on page 139](#)

 [Wireless Camera Phone Support on page 140](#)

## Standard Questions

why can't i send and recieve picture messages from my camera phone?

## Cancel Plan Standard Questions

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 [Cancel Plan on page 130](#)

## Standard Questions

how do i remove a calling plan?

i did not sign up for the int'l savings plan. how do i get it removed?

how do i cancel a plan online

cancel long distance plan

## Change Plans Standard Questions

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 [Change Plans on page 127](#)

## Standard Questions

can i sign up for home phone service i would like to switch carriers

---

i talked to someone about my phone service and they wear gonna switch my pl

---

i changed my plan but my bill appears t o be getting higher

---

how can i change my one rate plan?

---

change my service

---

how do i change calling plans

---

i'd like to change my service area

---

change to family plans

---

plan change

---

can i switch to a different plan when on a contract?

---

can i switch from one plan to another without being charged a termination fee.

---

can i change plans and keep the same number

---

can i change my minute plan

---

can i change my plan online?

---

change plan options

---

change price plans?

---

## Change Service Providers Standard Questions

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 [Change Service Providers on page 128](#)

## Standard Questions

check status of new service

---

am i going to see more charges from my current service provider?

---

already asked for a new service.what is the status

---

switch to a different company

---

customer migration form

---

get new service

---

check on new service

---

can i change to your company, and keep th same number?

---

## Close Account Standard Questions

[Account Support on page 151](#)

 [Close Account on page 152](#)

## Standard Questions

terminating services

closing an account?

how discontinue a service

i need to cancel my long distance service as i no longer have a phone

steps to cancel service

how do i cancel my service.

cancel online account

cancel long distant service

how do i close out my account

how do i cancel internet service?

how do i cancel an account?

how to cancel my service

i want to cancel internet service

want to cancel my dsl service

how do i cancell the acceleration service?

how do i cancel my phone service?

i would like to cancel my long distance service

how do i cancel a service

can i have my phone service canceled

how do i terminate my account ?

how do i cancel my service ?

where can i write to cancel service

stop service

close an account

how can i go about canceling my long distance service ?

how do i cancell service?

how do i close my dial-up account

at this point i am so frustrated, i'm ready to cancel service

cancel long distance sevice

how to i terminate my service?

i cancelled my service and i am being charged

how to close my account

how do i cancel long distance service

how do i close an account

how do i cancell my long distance service

i want to cancel this service

close my account

## Company Business Hours Inquiry Standard Questions

[General Company Inquiry on page 162](#)

 [Company Business Hours Inquiry on page 164](#)

### Standard Questions

what hours are the call center open from

sevice office hours

where do i go to determine how many hours/minutes i have used this month.

hours

what time does credit department open

weekend hours

day time hours

## Contact Customer Service Standard Questions

[Customer Service Inquiry on page 154](#)

 [Contact Customer Service on page 155](#)

### Standard Questions

can i talk to ha human

how do i get a hold of an actual person to talk to?

what is the toll-free number to talk to a person in the credit dept.?

can i talk to a representative now

customer service 800 number

my phone is not working who do i contact

talk to a human how

what is the number to customer service?

what is your customer service number

how can i talk to a real person about my account?

contact information

talk to a rep

what is your costomer service telephone number?

how do i talk to a live person

what number do i call to talk to customer service

i need the 1800 number

i need a talk with a representative

how can i reach customer service by phone

how can i speak with a real person

number for customer service



---

can you give me a 800 customer service number i can call

---

can i have the customer service telephone number?

---

contact by phone

---

why can't i talk to a customer service person directly.

---

i need to contact you but can't dial 1800 number

---

what is the phone number for customer service

---

how do i contact my e-mail administrator

---

customer service phone number

---

give me a phone number to your customer service

---

is there a phone number where i can speak to a live person????

---

phone number customer service

---

i want to speak to a person not a machine

---

1-800 number

---

your mailing address

---

contact info

---

contact via phone

---

what is your toll free number

---

telephone 800 number

---

how do i contact customer service using my phone

---

do you have another way i can get a hold of a person who works there other than using 611?

---

customer service contact

---

i'm trying to set up my voice mail a/c. when i get connected they do not prompt me to set anything up, just ask for the ten digit phone number of the person i'm trying to reach. help!

---

contact customer care

---

## Contract Expiration Support Standard Questions

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 [Contract Expiration Support on page 130](#)

### Standard Questions

i would like to know where do i go to end my service.

my contract term

when do i renew?

term contract how long

when is my contract finished

how long is my term

expires

contract expiration

when does my service expire?

when does my contract expire

## Customer Service Inquiry Standard Questions

[Customer Service Inquiry on page 154](#)

### Standard Questions

customerservice.com

hr. for customer service in oh

i tried to pay my bill on the web but it says that the name is wrong for th

italian customer support

customer service 800 number

what is the number to customer service?

what is your customer service number

what is your costomer service telephone number?

what number do i call to talk to customer service

how can i reach customer service by phone

number for customer service

can you give me a 800 customer service number i can call

can i have the customer service telephone number?

why can't i talk to a customer service person dirctly.

what is the phone number for customer service

coustomer service phone number

give me a phone number to your customer service

---

phone number customer service

---

how do i email about poor customer service

---

customer service agreement

---

how do i contact customer service using my phone

---

what if i have lost my sales receipt and customer service agreement papers?

---

customer service contact

---

contact customer care

---

customer care from my phone

---

## Directory Info Support Standard Questions

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 [Directory Info Support on page 145](#)

### Standard Questions

old number 954 646-4445 nedd new #

how can i change my number

unpublished number

no dial tone is my service disconnected

how do i get an unlisted number?

local telephone directory

how do i check local access numbers for dial-up internet service?

can i remove the ability to use directory assistance from my phone?

what is the telephone assistance program?

could you give me that number again?

toll free numbers

give me number for manchester ct. office

phone listing

directory assistance?

what number do i dial to get voicemail from a foreign country?

find people

411 serviceas

i have a added number

how do i view multiple numbers

copy multiple numbers

can i use a number from another phone

whats my sms number?

service number

serial number

## Dispute Bill Standard Questions

[Billing and Support Inquiry on page 158](#)

 [Dispute Bill on page 159](#)

### Standard Questions

i think this is the wrong bill you sent me, i received this one last month

## Email Management Research Standard Questions

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Email Management Research on page 112](#)

### Standard Questions

delete e-mail without opening e-mail

email?

what is the website to get the voicemail email notification?

web base e.mail service

messge e-mail notification

check my home e-mail messages

this is my e- mail address

what e-mail address do you have for our account?

why is email being bounced, it says over quota

forward tesxt to email?

email filter

what is my phones e-mail

emailo

check e-mail from other phone

can i ge a e-mail?

access blackberry email

e-mail a phone

can i text to an e-mail address

delete email server

send emai to phone

how to get to sidekick email from computer

balckberry email

## Email Management Support Standard Questions

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Email Management Support on page 132](#)

### Standard Questions

i forgot my password and email

password is invalid and i need to update my email address

---

how do i access my email

---

how do i e-mail accounts management

---

how do i set up e-mail

---

how do i set up pop email forwarding

---

setting up my email at tmomail

---

## Escalate Customer Help Standard Questions

[Customer Service Inquiry on page 154](#)

 [Escalate Customer Help on page 156](#)

### Standard Questions

are you an asshole?

slut

what address can i send a complaint to?

i want to talk to a manager about my cell phone

shit

complaints

complaint

## General Company Inquiry Standard Questions

[General Company Inquiry on page 162](#)

### Standard Questions

home office address

corporate headquarters address

## Instant Messaging Research Standard Questions

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Instant Messaging Research on page 111](#)

### Standard Questions

hi im trying to acess my personal home phone info

im already a customer, but i want to buy a different phone

how much is aim on a prepaid

instant messaging aol

is aim free service

aim service

does my plan cover aim for free

how do i use instant messengers on siemens cf62t?

how to stop aim pop ups

## International Calling Research Standard Questions

[Product Research on page 108](#)

 [Other Telco Services Research on page 122](#)

 [International Calling Research on page 122](#)

### Standard Questions

service in kuwait

i need the city code for salamanca spain

will you have india on your unlimited international plan sometime

to call from us to spain and back what plain is cheapest

how much are international calls per minute?

overseas call information

is there an international call-home calling card.

can i call international without online

how much does it cost to make a call from dayton oh usa to london england (

what was i charged for my international call last night?

prepaid rates from costa rica to ecuador

what international plans are offered?

what is cost of calls to italy

can i make an international call on my home plan?

does ny unlimited calling plan now include canada?

is any service center in india

is this for new zealand?

calling card rates call origin latvia

can i call from italy?

what is the prepaid phone card rate to call us from fiji? i am considering

international internet service?

code for karachi in pakistan

phone number in italy

do you have the international servis

i'd like more details on international plans

do you have calling card for international calls?

scotland

what number do i dial to get voicemail from a foreign country?

international gprs roaming

making calls from puerto rico

pre-paid sim card mexico

international picture messaging

sms india



---

rates for incoming international calls

---

receive international charge

---

incoming calls from overseas

---

dialing international

---

does t mobile cover the dominican republic?

---

receiving international calls

---

text abroad

---

johannesburg

---

can a pre-paid phone work in mexico

---

guam

---

international calls to the philippines

---

sms international

---

## International Calling Support Standard Questions

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 [International Calling Support on page 144](#)

### Standard Questions

how do i call from europe?

how do i block calls from an international number

why can't i receive international text message?

## Internet Services Research Standard Questions

[Product Research on page 108](#)

 [Service Plan Research on page 109](#)

 [Internet Services Research on page 109](#)

### Standard Questions:

eligibility requirements voice over ip

i need to get my dsl rebate form

i currently have 14.95 internet service, can i get the 11.95 service?

is dsl is available in my area

cellphone data plans

how much is dsl after the 1st year

can i get dsl and unlimited long distance?

dsl in las vegas

telephone number connecting me to internet

contract for voip

prepaid internet

dsl account

can i get unlimited mobile internet

i want to verify that my dsl service was ordered.

internet access numbers for the us

web base e.mail service

internet access from outside computer

international internet service?

question about standard dsl service plan

what types of internet service do you offer

wap technical information

gps internet cards

how fast is internet

wap

wap addresses

blackberry internet service

cables to connect cellphone to computer

web mobile content

why does it take so long to connect

blackberry web mail

download internet accelerator

delete email server

## Internet Services Support Standard Questions

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 [Internet Services Support on page 126](#)

### Standard Questions

can i set up more than one computer on the same dsl service?

if i get this service-can i add internetservice

i no longer want to be a online customer

trouble connecting to dsl

how do i check local access numbers for dial-up internet service?

cannot get info correct online; can you do it for me?

how do i get wap for my phone?

how do i text page someone from the internet?

how can i register online?

add internet

how do i download the internet manager

how do i set upto the web

why don't i have the internet on my nokia 3595

## Job Employment Inquiry Standard Questions

[General Company Inquiry on page 162](#)

 [Job Employment Inquiry on page 163](#)

### Standard Questions

how can i aplyfor a job?????

job opportunitiees

## Make Order Standard Questions

[Product Ordering and Sales Support on page 148](#)

 [Make Order on page 148](#)

### Standard Questions

buy minutes online

purchase phones online

## Non-Wireless Phone Research Standard Questions

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 [Non-Wireless Phone Research on page 120](#)

### Standard Questions

can you please give me more infromation about the 5840 cordless phone.

---

## Non-Wireless Phone Support Standard Questions

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 [Non-Wireless Phone Support on page 141](#)

### Standard Questions

why do i get static intermittently on my 5.8 ghz phones ?

---

## Number Portability Inquiry Standard Questions

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 [Number Portability Inquiry on page 146](#)

### Standard Questions

can i keep my current phone number

---

can i still keep my old numbers?

---

how do i keep my old number

---

can i port old phone numbers?

---

can i change plans and keep the same number

---

transfer phone numbers

---

can i keep the same phone number?

---

how do i keep my old phone number?

---

can i change to your company, and keep th same number?

---

number porting

---

## Office Location Inquiry Standard Questions

[General Company Inquiry on page 162](#)

 [Office Location Inquiry on page 163](#)

### Standard Questions

store nearest me

where is the closest store to me?

store located in petaluma

where are your stores located

payment locations

give me number for manchester ct. office

find location

stores in everett, wa?

are instant rebates available st store locations?

store

dealers

stores in lima ohio

locations

how to become dealer

miami store

## Payment Options and Payment Support Standard Questions

[Billing and Support Inquiry on page 158](#)

 [Payment Options and Payment Support on page 159](#)

### Standard Questions:

how do i pay my bill on line

i already paid my bill but i don't have my services back what i do

i tried to pay my bill on the web but it says that the name is wrong for th

cancel automatic payments

how do i logon to pay my bill

i can't get to my account to pay my internet service bill

i want to cancel automatic payment

switch autopay to view-n-pay

it is not letting me pay my bill

can i pay a bill w/u allie

why can't i pay my bill online?

i want to pay my bill online

why can't log on to pay my bill  
where can i pay my bill at??  
when i do that nothing is appearing. i can see that i paid my bill not what  
my phone is disconnected. i paid the bill yesterday with a credit card.  
i believe i used the wrong credit card to make my recent payment on line  
i want to stop online bill pay.  
who do i call to pay my bill over the phone  
am i signed up for auto pay thru my checking acct?  
i tried to make payment at payment center and was told i needed a 25 number  
i need to make payment arrangements  
i don't have a password. i'm not registerd to pay my bill online yet  
cancel auto pay  
i need to make arrangements to pay this bill on september 3,2004  
why won't this let me pay my bill now  
i dont see pay bill  
how can i check the status of payment made via an 800 number  
when i hit "pay bill" i'm told "page is not at this location". why?  
payment options  
my payment doesn't show as paid  
how do i make payment arrangements  
i want to pay my bill  
how do i cancel automatic bill pay?  
i want to pay my bill now and i can't  
make payment  
i try to pay my bill online and it keeps saying temporarily unavailable  
how do i pay my installation charge in installments?  
can't find wireless link to pay bill????????  
trying to pay my bill online, but telling me this page is not on this site.  
how do i add a second line to my auto pay  
hi! i paid my bill online last week and still do not see it in my payment  
need help paying bill online  
when i klik the bill pay and kick me back to same page. last time was ok.  
would like to pay bill but won't except says system is down,  
submit payment address  
paying prepaid phone bill  
want pay my bill  
how do i submit a payment  
make a opayment  
want to pay my bill  
what number do i dial on my mobile phone to pay my bill  
how do you cancel easy pay?  
pay my bill on line

---

how to pay bill online

---

bill pay adress

---

offline bill pay

---

how can i pay for my bill on line when my number is cancelled i'm over seas

---

why wont it let me pay my bill online

---

i want to make a payment

---

pay bill

---

payment was made around 2pm today service still not on why

---



## PDA Research Standard Questions

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 [Wireless Phone Research on page 119](#)

 [PDA Research on page 120](#)

### Standard Questions

blackberry licenses

do my blackberry have hifi ringer

blackberry 6710

set alarm sidkick 2

login desktop interface sidekick

do you have any sidekick promotions

1 year month sidekick then get new sidekick ?

blackberry 7290

do i have free long distance with the smaretaccess paln

download blackberry

calendar treo

blackberry internet service

do you need a sidekick plan to use a sidekick

access blackberry email

blackberry selecting carrieres

is there voice dial for the sidekick two

msn messenger sidekick

plans for the blackberry 7230

blackberry download

black berry

blackberry web mail

treo650

blackberry 7250

palm phone

balckberry email




pocket pc phone 2003

pocket pc+gprs

do offer services for pdas?

## PDA Support Standard Questions

[Product Support on page 125](#)

-  [Phone Equipment Support on page 139](#)
-  [Wireless Phone Support on page 139](#)
-  [Wireless PDA Support on page 140](#)

## Standard Questions

blackberry help

what does blackberry unlimited w/enterprise email add-on cost?

## Personalization and Content Management Research Standard Questions

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Personalization and Content Management Research on page 114](#)

## Standard Questions

sending pictures

download address book

hifi ringers

upload photos

free valentine wallpaper

software download

free valentine downloads

do my blackberry have hifi ringer

sample ringtones

how to download picture s sent to non camera phone

my pics

saving a ringtone to sim card

ringtunes

insert title in picture

upload numbers

downloading caller tunes

international picture messaging

take out pictures

what kind cable wire do i need to be able to down load ring tones on my pc for motorola v600?

additional megatonnes

can i download manuals for my phone

how much is it for te album?

themes

delete album pictures

group ringtones

down load

download blackberry

game downloads for nokia 6800

pics

|                                                                      |
|----------------------------------------------------------------------|
| calendar treo                                                        |
| download tetrus                                                      |
| send pictures to a cellphone                                         |
| download messenger                                                   |
| background images                                                    |
| wi fi ring tones                                                     |
| indian ring tone                                                     |
| download tones                                                       |
| personalizations                                                     |
| what do you do to delete a ring tone that you have downloaded?       |
| sending picyures messages                                            |
| free ringtones?                                                      |
| blackberry download                                                  |
| how to get ringtones                                                 |
| v180 data download                                                   |
| can i put different ringtones with different people in my phonebook? |
| download ringtones                                                   |
| download internet accelerator                                        |
| v300 download                                                        |
| can i listen to ringtones free                                       |
| my ring tones have been deleted                                      |
| how to download ringtones over the internet                          |
| personalizing callertunes                                            |
| my albums                                                            |
| sign up for my album                                                 |
| ringtones with free wallpaper                                        |
| download phone numbers to my phone                                   |
| i want more ringtones where should i go to buy them                  |
| prepaid games                                                        |

## Personalization and Content Management Support Standard Questions

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Personalization and Content Management Support on page 134](#)

### Standard Questions

how do i erase pictures saved to my album?

how can i get different ringtones from the download catalog

how do i download the internet manager

how do i get my wallpaper on my phone

how do you get your regular ringtone back

i can't tell if my phone is compatible for downloading ring tones

why i can't receive pictures messges on my handset

how do i sign in to my album

set up picture album

how do i keep picture

how do i download phone numbers to my cell phone?

how can i put up my email pictures that were lost because i had to reset my phone.

why cant i get ringtones

why am i unable to download a song to my phone

how do i upload picture from my phone onto my computer?

download upgrade

why can't i download hifi ringers?

how can i send a picture from my album to my phone?

can't download picture message

how do you email pictures

how can i get ringtones for my phone

how do you play games

i dont know how to send pictures in any mobile phones

how do you download wallpaper

why cant my d415 phone recieve wallpaper?

## Phone Equipment Accessory and Parts Research Standard Questions

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

 [Phone Equipment Accessory and Parts Research on page 121](#)

## Standard Questions

are there any sim card just for a constant minute

what is the d on the face of my phone

model 2222 answering machine

insert sim card motorola v60

accessories for motorola a630

how to turn the keypad volume up

how much are sim cards?

network cards

prise for sim card

sim phone numbers

i need a new antenna

unlock sims

pre-paid sim card mexico

gps internet cards

install smart cards

can i switch sim card to new phone

gsm sim card

what does sim stand for

phone accessories

do you have leather cases for a motorola c650

motorola v180 lens

cables to connect cellphone to computer

chargers

data cable for motorola

laptop internet cards

where can i purchase a sidekick 2 carrying case at

do you have cell phone faces?

c650 case or clip

where to get a sims card

samsung antennas

## Phone Equipment Accessory and Parts Support Standard Questions

[Product Support on page 125](#)



[Phone Equipment Support on page 139](#)



[Phone Equipment Accessory and Parts Support on page 141](#)

## Standard Questions

i am trying to get help with my answering machine

---

why does my phone have sim card rejected, how do i fix it?

---

i cant use the adapter i recieved

---

screen reads sim blocked how do i unlock

---

what is a sim error

---

how do i get my phone to ring through my ear piece

---

bad sims card

---

## Phone Equipment Research Standard Questions

[Product Research on page 108](#)

 [Phone Equipment Research on page 118](#)

### Standard Questions

telephones

what is the radio frequency of my phone

cells phones

i want to make a call and charge it to my phone

activating a new phone

i need to put a callers block on long distance calls going out on my phone

operator assisted calls from my home phone

returning leased phones

list of recents calls made from my phone

i want to turn on privacy directory on my home phone

need a new phones

i want to buy a new phone onlines

new phones coming out

i need to buy a new phone

can i get a new phone?

i want to get a new phone

see the phones

## Phone Equipment Documentation Standard Questions

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 [Phone Equipment Documentation on page 143](#)

### Standard Questions

where is a manual for my phone?

i need the owners manual for the 2444 phone

can i download manuals for my phone

v300 owners manual

## Phone Equipment Support Standard Questions

[Product Support on page 125](#)





*Phone Equipment Support on page 139*

## Standard Questions

why has my phone been disconnected?  
how do i receive repairs work on my phone  
my phone is not working who do i contact  
how do i get wap for my phone?  
would i know if my phone was disconnected?  
forgot phone pin number  
how do i use the call forwarding feature on my phone?  
how come i cannot get anyone to help me resolve my telephone problem  
why do i get static intermittently on my 5.8 ghz phones ?  
can i get a repairman to fix phone?  
our house phone only rings one time and it will hang up  
what is my phone's e-mail  
i have no service right now. dont know why?  
broken phone  
can i use my phone in las vegas?  
how do i get my wallpaper on my phone  
how do i get my phone started?  
password you sent to my phone does not work for log in  
how can i hear my voice mails from another phone  
how do i change to different phone  
i can't tell if my phone is compatible for downloading ring tones  
add \*67 on my phone  
where can i get my phone tested to see if it is working properly?  
damaged phone  
how could i get a free phone  
phone showing wrong network  
if i change my plan can i also change the phone?  
why am i unable to download a song to my phone  
how do i upload picture from my phone onto my computer?  
if i use my phone in another state do i get charged roaming charges  
how can i receive email from my siemens tmobile phone?  
can i change my current phone?  
why doesn't my phone get service?  
how do i change my phone  
how can i send a picture from my album to my phone?  
how can i get ringtones for my phone  
download phone numbers to my phone  
what do i do if my phone isn't working  
how do i check my voicemail from another phone?  
why can't my d415 phone receive wallpaper?

---

no service-need to check messages from another phone, how to do this?

---

## Prepaid Services Research Standard Questions

[Product Research on page 108](#)

 [Service Plan Research on page 109](#)

 [Prepaid Services Research on page 110](#)

### Standard Questions

prepaid internet

prepaid rates from costa rica to ecuador

prior to my signing on online i was promised a \$20 phone card. where is it

wish to purchase wireless prepaid minutes

prepay call history

what is the prepaid phone card rate to call us from fiji? i am considering

pre paid phone refill

purchase prepaid minutes on the net

paying prepaid phone bill

pay as yougo cards

pre-paid sim card mexico

motorola v180 can i use this phone as a pay as you go phone

how to extend pre paid

how much is aim on a prepaid

prepaid cellphones

prepaidphones

does it matter what phone you get if you have pay as you go?

how much prepaid phones you have?

prepaid cardphones

can a pre-paid phone work in mexico

do you have prepaid service

prepaid cell phone

prepaid phones

prepaid games

## Prepaid Services Support Standard Questions

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 [Prepaid Services Support on page 127](#)

## Standard Questions

how to add minutes to prepaid phone my card

---

how do i activate my prepaid phone card

---

how do i find out the minutes used on my pre paid phone?

---

changing contract phones to pay as you go

---

## Privacy Inquiry Standard Questions

[General Company Inquiry on page 162](#)

 [Privacy Inquiry on page 164](#)

## Standard Questions:

privacy screener

---

i want to turn on privacy directory on my home phone

---

## Product Rebates Inquiry Standard Questions

[Product Ordering and Sales Support on page 148](#)

 [Product Rebates Inquiry on page 149](#)

## Standard Questions

i need to get my dsl rebate form

---

are instant rebates available st store locations?

---

where do i get my mail in rebate for a samsung e105?

---

rebate form fo the seimen phone

---

i want to check my rebate

---

rebate online

---

where do i find rebate forms?

---

rebates

---

what is the status of my rebate?

---

can i get a rebate for buying a new phone?

---

how do i receive rebate form for motorola v300?

---

c250 rebates

---

sharp rebate

---

rebate for upgrading 6010

---

how do i get my rebate on-line

---

c650 rebate form

---

what if the rebate expiration date is after the fact?

---

## Product Research Standard Questions

*Product Research on page 108*

### **Standard Questions**

sell our products

products

## Purchasing Minutes Research Standard Questions

*Product Research on page 108*

 *Service Feature Research on page 110*

 *Service Plan Minutes Research on page 115*

 *Purchasing Minutes Research on page 116*

### **Standard Questions**

what site do i go to for getting more minutes for my go phone

can i add more minutes online

buy minutes online

can minutes be added by phone

## Purchasing Minutes Support Standard Questions

*Product Support on page 125*

 *Service Feature Support on page 131*

 *Service Plan Minutes Support on page 136*

 *Purchasing Minutes Support on page 136*

### **Standard Questions**

how do i get a web password/increase minutes

how do i put minutes on my phone?

## Report Abuse Or Fraud Standard Questions

*Customer Service Inquiry on page 154*

 *Report Abuse/Fraud on page 156*

## Standard Questions

hi allie, what is the code to punch in so unwanted callers are blocked?

how do i email you becuae you slammed me?

slam

telephone fraud

is there a "no call list"; i can sign up on to stop these calls?

## Report Lost Phone Standard Questions

[Customer Service Inquiry on page 154](#)



[Report Lost Phone on page 157](#)

## Standard Questions

lost phone

stolen phone

where do i go to report a lost phone?

how can i put up my email pictures that were lost because i had to reset my phone.

## Report Network Or Signal Problem Standard Questions

[Customer Service Inquiry on page 154](#)



[Report Network/Signal Problem on page 157](#)

## Standard Questions

outage

why do i get static intermittently on my 5.8 ghz phones ?

if i change to your networkon the 1000 minute special can i add the mobil to mobil minutes?

network unavailable

how do i get a better signal at my house?

phone showing wrong network

bad reception

report bad coerage

why i get no reception

## Request Bill Copy Standard Questions

[Billing and Support Inquiry on page 158](#)



[Request Bill Copy on page 161](#)

## Standard Questions

get a copy of a past bill

i need a copy of the previous month statement

my past bills come up blank. how do i get copies?

can i rcv paper copy of past bills?

how much is my august bill

i am wondering how my bill is so high. can i get a copy of the last three b

i need to make arrangements to pay this bill on september 3,2004

i cancelled my account on august 1st why am i billed through september 1st?

can you please send me another paper bill for the charges due in july 2004?

need to see calling call summary

where is my bill for june 26-july25?

need to view bill from oct. 2004

february bill

invoice for december bill

## Reverse Number Lookup Standard Questions

[Product Support on page 125](#)

 [Other Telco Services Support on page 143](#)

 [Reverse Number Lookup on page 147](#)

## Standard Questions

513-678-7777

6173317777

## Ringtones Research Standard Questions

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Personalization and Content Management Research on page 114](#)

 [Ringtones Research on page 114](#)

## Standard Questions

is caller tunes free for the first month

where to find caller tunes

sample ringtones



---

saving a ringtone to sim card

---

ringtunes

---

downloading caller tunes

---

what kind cable wire do i need to be able to down load ring tones on my pc for motorola v600?

---

additional megatones

---

group ringtones

---

voice ringers

---

wi fi ring tones

---

indian ring tone

---

what do you do to delete a ring tone that you have downloaded?

---

buy a new caller tune

---

free ringtones?

---

how to get ringtones

---

can i put different ringtones with different people in my phonebook?

---

download ringtones

---

can i listen to ringtones free

---

my ring tones have been deleted

---

how to download ringtones over the internet

---

want to hear the mega tone choices

---

ringtones with free wallpaper

---

i want more ringtones where should i go to buy them

---

## Ringtones Support Standard Questions

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Personalization and Content Management Support on page 134](#)

 [Ringtones Support on page 135](#)

### Standard Questions

how can i get different ringtones from the download catalog

how do you get the mega tones off

how do you get your regular ringtone back

i can't tell if my phone is compatible for downloading ring tones

why cant i get ringtones

how can i get ringtones for my phone

## Roaming and Cell Phone Network Research Standard Questions

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Roaming and Cell Phone Network Research on page 113](#)

### Standard Questions

international gprs roaming

gsm sim card

roaming in alaska

regional roaming

gprs tools

gsm 1800

does my plan include free roaming and long distance

pocket pc+gprs

## Roaming and Cell Phone Network Support Standard Questions

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Roaming and Cell Phone Network Support on page 133](#)

## Standard Questions

how do we get our gprs to work?

ipaq+gprs settings

## Schedule Service Appointment Standard Questions

[Customer Service Inquiry on page 154](#)



[Schedule Service Appointment on page 155](#)

## Standard Questions

how do i recieve repairs work on my phone

how do i schedule a repair?

what is the repair number?

how can i cancel an appointment to have a tech come to house?

can i get a repairman to fix phone?

what is the phone number for repair service?

## Service Feature Research Standard Questions

[Product Research on page 108](#)



[Service Feature Research on page 110](#)

## Standard Questions

what number do i call to retrieve messages?

can you get copies or hear old deleted messages

what local service features do you provide

sending messages over the internet

messge e-mail notification

check my home e-mail messages

can i veiw previous messages online

is bluetooth an extra service

sms message

aol alert

sending picyures messages

sned messages

send a text msg

message code

do weather alerts cost anything

are messages free?

## Service Feature Support Standard Questions

[Product Support on page 125](#)



[Service Feature Support on page 131](#)

### Standard Questions

how do i listen to old messages

message light on voice box not working

change alert sound for recieveing a message

how do i send a message

want to remove alerts on acct.

how do i cancel alerts on my account

why i can't receive pictures messges on my handset

how do i set up my message

i added 1000 text msg to my plan last month and i don't see that as apart of my service

how do i change my message

no service-need to check messages from another phone, how to do this?

## Service Plan Minutes Research Standard Questions

[Product Research on page 108](#)



[Service Feature Research on page 110](#)



[Service Plan Minutes Research on page 115](#)

### Standard Questions

trying to check mins

what is the time limit on the nights and weekends long distance plan?

is there a 30 minute plan for 3.00

wireless rates

how much are international calls per minute?

where do i go to determine how many hours/minutes i have used this month.

are there any sim card just for a constant minute

free minutes rebate form

how to check the minutes used for wireless

night minutes start

do you have a plan that includes 600 minutes, free nights and weekends fr., sat. and sun.

what days are the weekends

when do free nights start?

free night and weekend

---

if you are in another time zone, which time does off peak go by, home location or area calling from?

---

when do weeknights start

---

300 minutes

---

weekend hours

---

start weeknight minutes earlier

---

do internet minutes apply to airtime usage

---

mobile-to-mobile minutes

---

are nights for free?

---

after what hour is considered night minutes

---

three day weekend plan

---

where do i go to find out how many minutes i have used already

---

what are the conditional minutes

---

night and weekend min

---

## Service Plan Minutes Support Standard Questions

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Service Plan Minutes Support on page 136](#)

### Standard Questions

how do i find out how many min. i have left this month

i need weekend help with this

what was i charged for my international call last night?

do i have any free minutes in my plan

look at my minutes used

what site do i go to for getting more minutes for my go phone

i am getting calls late in the night from a private call how can i stop it

at 10 cents a minute and the minum is \$7.00 does my bill gets higher each

can i add more minutes online

they never gave me a password for online i need to check how many min. i ha

how to add minutes to prepaid phone my card

how do i find out the minutes used on my pre paid phone?

check my minutes on my cellphone

can minutes be added by phone

how can i check my free minutes online?

check minutes available from my cell phone

how can i check my minutes on my phone

how do i get a web passwordincrease minutes

can i change my minute plan

if i change to your networkon the 1000 minute special can i add the mobil to mobil minutes?

how do i put minutes on my phone?

how many anytime minutes do i have left

## Service Plan Research Standard Questions

[Product Research on page 108](#)

 [Service Plan Research on page 109](#)

### Standard Questions

get local service only

what is the time limit on the nights and weekends long distance plan?

is there a 30 minute plan for 3.00

---

is there a way to bundle a cell phone with the new advantage program

---

will you have india on your unlimited international plan sometime

---

cellphone data plans

---

is long distance plans mandatory

---

payment plans

---

contract for voip

---

can i sign up for home phone service i would like to switch carriers

---

what are your long distance plans

---

what is the best calling plan for me?

---

local plans

---

cellular service

---

what international plans are offered?

---

start a home phone service

---

where do i look for a new phone plan

---

can i make an international call on my home plan?

---

do you provide business phone service

---

does ny unlimited calling plan now include canada?

---

can you be 17 to open a contract

---

cellular services

---

price for unlimited local and long distance plan?

---

i would like know about cell phone service and phone for same use.

---

question about standard dsl service plan

---

how much is a local plan?

---

what plan allows me to call so. cal any time of the day cheapest rate?

---

i'd like more details on international plans

---

why i see only one phone from my family plan

---

family plan

---

what is the smart access rate plan

---

when is my year contract done

---

do you have a plan that includes 600 minutes, free nights and weekends fr., sat. and sun.

---

samsung d500 on contract

---

can i have a \$19.99 plan with this phone?

---

plans available for existing customers

---

contract?

---

do you need a sidekick plan to use a sidekick

---

do family time plans have free roaming and long distance?

---

can i switch to a different plan when on a contract?

---

do you get a free phone with basic plan

---

does it matter what phone you get if you have pay as you go?

---

plans for the blackberry 7230

---

what time does unlimited night and weekends minutes start on the family time plan of 69.99

---

mobile-to-mobile minutes

---

---

can i get a free phone with if my contract is up?

---

find contract date

---

three day weekend plan

---

talk or walk plan

---

extend my current plan with up graded phones

---



## Service Plan Support Standard Questions

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

### Standard Questions

i would like a cheaper rate plan. please help

i dont know my plan or password, i need to access on line.

how do i change calling plans

why i see only one phone from my family plan

can i add a line to my moms contract and still get the nokia6800 for free

how can i get 3 day weekend


i added 1000 text msg to my plan last month and i don't see that as apart of my service

how much will my phone be if i dont by a plan

## Service Suspension Or Reactivation Support Standard Questions

[Product Support on page 125](#)

 [Service Plan Support on page 126](#)

 [Service Suspension / \(Re-\)Activation Support on page 129](#)

### Standard Questions

why has my phone been disconnected?

no dial tone is my service disconnected

my phone is diconnected. i paid the bill yesterday with a credit card.

reconnect a line that was disconnected by mistake

when will my service be disconnected for non payment?

can you disconnect this service and forward the bill?

would i know if my phone was diconnected?

i want to disconnect my phone

phone keeps cutting off

how to diconnect service

how long does it take to get service back after payment

can i reactivate my phone on this website?

## Text Messaging Research Standard Questions

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)



*Text Messaging Research on page 111*

## Standard Questions

i want to send a text message from the computer

text messages

i want to send one sms

phone phonesinstant messenger

how much does text messaging cost?

text messages

sms message

sms india

can you show me my text messages

download messenger

free internet messaging

can i text message any mobile phone

tet messaging

number of text messages

can i send a text message through the website?

block spam text message

do you have unlimited text messages

mms url

msn messenger sidekick

computer to phone mms

text messaging online

blocking incoming text messages

texting

text message replies

unlimted texting

how much for 1000 text messages, monthly

block sms messaging

can tou send a text message from computer

whats my sms number?

whats the sms center numver

can i use yahoo messenger?

text messaging for all phone

sms/tap

text messages old

sent text message

sms international

## Text Messaging Support Standard Questions

*Product Support on page 125*



*Service Feature Support on page 131*



*Text Messaging Support on page 131*

## Standard Questions

how do i send text messages to my phone

why can't i receive international text message?

how can i send text messages

mms help

msn messenger setup

how do i block text messages on my phone

how do i read jy text messages?

how do i set up text messaging

how do i check my text messages

how do i block text messaging from coming to my cell phone?

i can send out going text messages and outgoing phone calls but i cannot recieve anything

does it cost to recieve text messages if you don't subscribe fot text message service?

## Track Order Standard Questions

[Product Ordering and Sales Support on page 148](#)



[Track Order on page 149](#)

## Standard Questions

when did my service start

order status

i want to verify that my dsl service was ordered.

how can i find the status of my order?

when will my service be turned on ?

package tracking

check order

tracking orders

how do you check on an order that was place if you do not have the order id number

where is my order

tracking an order

## Understanding a Bill Standard Questions

[Billing and Support Inquiry on page 158](#)



[Understanding a Bill on page 161](#)

## Standard Questions

negative balance on bill

---

i click on view bill but no billing information comes up

---

can i read my phone bill on line

---

i need help understanding a charge on my longdistance bill?

---

what extra fees are applied each month with my bill ?

---

## Unlock Phone Password Codes Standard Questions

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 [Unlock Phone Password Codes on page 142](#)

### Standard Questions

what does puk code stand for?

how do i fix a puk

unlock

what does puk mean?

sim card blocked puk code

how can i get my cell phone password

## Update Account Profile Standard Questions

[Account Support on page 151](#)

 [Update Account Profile on page 151](#)

### Standard Questions

me telephone number has been changed to 703-897-7777 efective 17 aug 04.

change email address

what is the phone number for new service?

can i change my id?

how do i change my login script from my old number to my new number

old number 954 646-7777 nedd new #

how can i change my number

delete e-mail without opening e-mail

cant remember my wifes new cell phone number can you help

will it cost to change number

trying to update account,phone no no recognized ?

how do i change my billing address?

i cant get my new phone number

my e-mail address has changed

how do i change my home phone number

my e-mail has not been changed to reflect the new

i have a new phone number

i need a new password and user id

changed account number

---

how can i change my current phone number?

---

change e-mail address

---

adding phone number

---

remove my email address i don't have an account with you anymore

---

how can i have a new phone number

---

password is invalid and i need to update my email address

---

change my email address

---

all i get is "please update your email address. it has not changed

---

change billing address

---

how do i change my credit card number

---

how do i update my bank name

---

why wont the password reset page register the new password that i entered

---

i reset my password, are you going to email me a new one?

---

can i change name on bill?

---

how do i change the account name?

---

need to change by credit card number

---

add new telephone number for home

---

how to update my address

---

submit payment address

---

last bill before chainge number

---

what does blackberry unlimited w/enterprise email add-on cost?

---

how do i change name on phone account

---

change password

---

can i just a new phone without getting my number changed

---

i have a added number

---



## Upgrade Phone Standard Questions

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 [Upgrade Phone on page 142](#)

### Standard Questions

phone upgreade

upgrade policy

how do i upgrade

updating phones

2for 1 price handset upgrade

when can i upgrade

pocket pc update

why am i getting screwed while trying to upgrade to a newer phone??

how can a upgrade my phone online

how do i upgrade my phone i have now?

what phones can i upgrade to?

upgrade telephones

do i have a handset upgrade available

how long do you have to have your phone to upgrade?

2003 updates

upgrade device

how can i upgrade?

can i get a free upgrade on my phone?

rebate for upgrading 6010

when can i upgrade my phone without being expensive

want to upgrade

i want to upgrade, can i

phone upgrade pricing

## View Bill Details Standard Questions

[Billing and Support Inquiry on page 158](#)

 [View Bill Details on page 160](#)

### Standard Questions

no billing detail shows on screen?

how do i view call details

---

how do i dispute a long distance call charged to me?

---

prepay call history

---

i can not view my bill details on line

---

history of activity

---

i need a list of current calls

---

past activity details for (714)657-7777

---

last calls

---

calls made to me

---

i would like to see what numbers have been called for the current month

---

i want to check my call history how do i check my call history

---

calls made by me

---

## Voicemail Management Research Standard Questions

[Product Research on page 108](#)

 [Service Feature Research on page 110](#)

 [Voicemail Management Research on page 113](#)

### Standard Questions

voice mail access number

what number do i call to retrieve messages?

what's my default voice mail password

what is the number to call to access my voice mail

what is the number to access voice mail

what is the website to get the voicemail email notification?

do you have a featurw where i can retrieve voice mail messages online?

do you have an automated answering service?

can i send a voice mail message to anyone?

what is the toll free voicemail access number

i would like my voicemail to let me know date and time of call

how to access voice mail?

home phone voice mail how many rings before vm answeres

accessing my voicemail

this is my e- mail address

what number do i dial to get voicemail from a foreign country?

voicemail and password

how to make a voice mail

retrieve saved voice mail

retrieving voice mail from other phone

## Voicemail Management Support Standard Questions

[Product Support on page 125](#)

 [Service Feature Support on page 131](#)

 [Voicemail Management Support on page 134](#)

### Standard Questions

how do i access voicemail?

my voice mail is not accepting my password

how to i cancel home voice mail?

voicemail setup

---

how do i change my voice mail message

---

what phone number do i call to set up voice mail?

---

how does fax work with voice mail?

---

change voice message

---

reset voicemail

---

cancel voice mail

---

how do i access my voicemail?

---

change password on voicemail

---

how can i hear my voice mails from another phone

---

how do i delete voice mail message

---

how to reset pin for voice mail

---

how do i check my voicemail from anothe phone?

---

## Website Inquiry Standard Questions

[Website Inquiry on page 165](#)

### Standard Questions

is your website down?

what is the website to get the voicemail email notification?

when will the website be back up

can i send a text message through the website?

can i reactivate my phone on this website?

## Website Spanish Language Support Standard Questions

[Website Inquiry on page 165](#)



[Website Spanish Language Support on page 165](#)

### Standard Questions

puedo enviar mensajes gratis

## Wireless Phone Research Standard Questions

[Product Research on page 108](#)



[Phone Equipment Research on page 118](#)



[Wireless Phone Research on page 119](#)

### Standard Questions

cell phones

is there a way to bundle a cell phone with the new advantage program

i want a flip phone wich one is more popular

cellphone data plans

motrola v600

cells phones

i want to talk to a manager about my cell phone

v.66 series

cell phone from commercial?

does the v300 have a calculater

i want to buy the samsung e105

picture phones

motorola v180

|                                               |
|-----------------------------------------------|
| 3500 nokia                                    |
| panasonic g51                                 |
| how much is the nokia 8290                    |
| game downloads for nokia 6800                 |
| prepaid cellphones                            |
| samsung flip phone                            |
| send pictures to a cellphone                  |
| can i text message any mobile phone           |
| do you have nokia 7260                        |
| sony ericsson p800                            |
| lg g4020                                      |
| hp6340                                        |
| nokia d500                                    |
| 3300                                          |
| whichich is imei # located on the white label |
| nokia3360                                     |
| motorolaa630                                  |
| v300 download                                 |
| nokia 10                                      |
| what is the frequency for samsung e 105       |
| where can i find info about the nokia 3590    |
| prepaid cell phone                            |
| sony ericsson z200                            |
| let me see camera phones                      |
| nokia 6610i                                   |
| lg vx3200                                     |
| e 105 phone                                   |
| more nokia phones                             |
| sony p900                                     |
| sharp tm150                                   |
| how much does the nokia 9290 cost?            |
| v 66                                          |
| lg u8138                                      |
| do you have nokia 3595                        |

## Wireless Phone Support Standard Questions

[Product Support on page 125](#)

 [Phone Equipment Support on page 139](#)

 [Wireless Phone Support on page 139](#)

### Standard Questions

how do i activate my new cell phone?

my x105 does not work in taiwan

check my minutes on my cellphone

What kind cable wire do i need to be able to download ring tones on my pc for motorola v600?

change cell phone

how do i find an imei#

check minutes available from my cell phone

how do i download phone numbers to my cell phone?

how do you activate a cell phone with a calling card?

i already have a cell phone how do i get t mobile service?

how do i go by getting a new t mobile phone

does 6610 support modem

why don't i have the internet on my nokia 3595

i don't know how to send pictures in any mobile phones