

# Intelligent Search Language Reference

## InQuira Application Intent Libraries

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## **InQuira**

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# Preface About This Guide

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

This preface includes information on:

- The general organization of this guide
- The support services available from InQuira Customer Support
- The available product documentation

# In This Guide

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

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

# Contacting InQuira

You can contact InQuira by mail, telephone, fax, and email.

Address:	851 Traeger Ave.
	Suite 125
	San Bruno, CA 94066
Telephone:	(650) 246-5000
InQuira Customer Support Hotline:	(888) 947-8324
	NOTE: See <i>InQuira Customer Support</i> on page 3 for more information on reporting incidents to InQuira Customer Support.
Fax:	(650) 264-5036
Email:	For sales information, send email to sales@inquira.com. For product support, send email to support@inquira.com.
World Wide Web:	Learn more about InQuira products, solutions, services, and support on the world wide web at: www.inquira.com.

# InQuira Customer Support

InQuira Customer Support is available from 6:30 am to 4:30 pm PST, excluding InQuira holidays.

For Priority 1 incidents, such as when a production system hangs or crashes, or when continued use of the product is impossible, please use the support hotline: (888) 947-8324.

IMPORTANT: We accept Priority 1 requests only by telephone. We recommend that you send a follow-up email for Priority 1 requests after contacting InQuira Customer Support using the support hotline.

For Priority 2, 3, and 4 incidents, as described below, please contact InQuira Customer Support by email at: support@inquira.com.

Incident response times are determined by the following priority definitions:

Priority	Contact	Response Time	Definition
1	The InQuira Customer Support hotline: (888) 947-8324	1 business hour	A production system hangs or crashes, or continued use of the product is impossible.
2	support@inquira.com	8 business hours	The product is usable with major restrictions on functionality.
3	support@inquira.com	16 business hours	The product is usable with minor restrictions on functionality.
4	support@inquira.com	3 business days	You have a question or an enhancement request pertaining to the software or the documentation.

# InQuira Product Documentation

InQuira documentation is available only to licensed users of our software products and may not be redistributed in any form without express permission from InQuira, Inc.

The InQuira documentation is available in PDF format. It is packaged in the /docs directory, within the /inquira directory, for example:

<InQuira\_install\_dir>/inquira/docs

NOTE: You need a PDF reader application installed on each processor on which you plan to view the InQuira product documentation. The Adobe Acrobat reader is available from Adobe Systems at: http://www.adobe.com.

Detailed information about each product document set is available in:

- Intelligent Search Documentation on page 5
- Intelligent Search Analytics Documentation on page 6
- Information Manager Documentation on page 7
- Contact Center Documentation on page 8

If you encounter a problem, need help using the documentation, or want to report an error in the content, please contact InQuira Customer Support as described in *InQuira Customer Support* on page 3.

If you need help obtaining InQuira product documentation, or want to obtain permission to redistribute a portion of the contents, please contact your InQuira account representative.

# Intelligent Search Documentation

Intelligent Search is distributed with the following documentation.

Document	Number	Description
Intelligent Search Installation Guide	IS80-IG-00	This guide is intended for technical staff who are responsible for installing InQuira 8.1. It provides detailed information on installing InQuira 8.1 and configuring the application on a single processor using the Installation Configuration Environment facility.
Intelligent Search Administrator's Guide and Reference	IS80-CA-00	This guide is intended for system and application administrators who need to configure an InQuira 8.1 application in an enterprise environment. It describes InQuira 8.1 integration, development, configuration, and maintenance processes and tasks.
Intelligent Search Language Administration Guide	IS80-LA-00	This guide is intended for business users and subject matter experts who need to create and maintain the language processing elements of a InQuira 8.1 application using the System Manager. This book provides usage information about the System Manager, conceptual information about the InQuira 8.1 language objects, and task information about the process of managing the user experience provided by the InQuira 8.1 application.
Intelligent Search Tuning Guide	IS80-LD-00	This guide is intended for application developers who need to create and maintain advanced InQuira 8.1 language-processing elements using the Dictionary and other InQuira Language Workbench applications.
Optimizing InQuira Intelligent Search	IS80-AG-00	This guide is intended for application developers who need to implement InQuira 8.1 advanced features, including Personalized Navigation and Process Wizards.
Intelligent Search Application Developer's Guide	IS80-API-00	This guide provides information about integrating and customizing the InQuira 8.1 Personalized Response User Interface.

Intelligent Search	IS80-LRG-00	This guide is for language developers
Language Reference		implementing InQuira 8.1 applications that
		utilize the intent libraries and advanced
		language processing functions. These guides
		are published as separate documents that
		provide reference information for each
		industry-specific intent library. Each reference
		also contains complete descriptions of InQuira
		Match Language and Variable Instantiation
		Language.
<b>Intelligent Search User</b>	IS80-UI-00	This guide is intended for application
Interface Guide		developers who need to customize the InQuira
		8.1 Personalized Response User Interface, and
		integrate it with a production web application.
		It contains information about the elements and
		features of the User Interface, and provides
		guidelines for integrating it into an enterprise
		web architecture, customizing its appearance
		and functionality, and implementing various
		special features.

# Intelligent Search Analytics Documentation

Intelligent Search Analytics is distributed with the following documentation.

Document	Number	Description
InQuira Analytics Installation Guide	IA80-IG-00	This guide is intended for technical staff who are responsible for installing Intelligent Search Analytics. It provides detailed information on installing and configuring the Intelligent Search Analytics product for use with an InQuira 8.1 application.
Analytics User Guide	IA80-CA-00	This guide is intended for systems and application administrators who need to configure the Intelligent Search and Information Manager Analytics components to report on InQuira 8.1 application performance.

# Information Manager Documentation

InQuira Information Manager is distributed with the following documentation.

Document	Number	Description
Information Manager Installation Guide	IM80-IG-00	This guide is intended for technical staff who are responsible for installing InQuira Information Manager. It provides detailed information on installing and configuring the Information Manager product.
Information Manager Administration Guide	IM80-CA-00	This guide is intended for systems and application administrators who need to configure and administer an InQuira Information Manager application, and integrate it with an InQuira 8.1 application. It also contains information for general business users who need to use the Information Manager to create and manage content.
Information Manager Content Authoring Guide	IM80-AG-00	This guide is intended for technical staff who are responsible for authoring content in InQuira Information Manager. It provides detailed information on creating content and managing workflow tasks in the Information Manager console.
Information Manager Developer's Guide	IM80-WSR-00	This guide is intended for application developers who need to integrate Information Manager content, content category, and user and security functions with external applications. It contains reference information and examples for all packages, classes, methods, and interfaces of the Information Manager Web Services API.

#### **Contact Center Documentation**

The InQuira 8.1 contact center products are distributed with the following documentation.

Document	Number	Description
Contact Center Advisor Integration Guide	CA80-IG-00	This guide is intended for application developers and systems administrators who need to plan for and integrate the InQuira Contact Center Advisor with an InQuira application and a supported CRM application.
Intelligent Search Siebel Integration Guide	CAS80-IG-00	This guide is intended for application developers and systems administrators who need to plan for and integrate InQuira 8.1 with Siebel 7 Enterprise Applications using the Siebel Adapter for InQuira 8.1.

## Screen and Text Representations

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

#### References to World Wide Web Resources

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

# Chapter 1 IML and VIL Reference

InQuira 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 13.

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 12.

Please see *The Variable Instantiation Language (VIL)* on page 42 for more information on VII.

# IML and VIL Quick Reference

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- '...' (Single Quotes) Canonical Form Expressions on page 15
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- /\*...\*/ *Comments* on page 42

# **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 14
- *Operators* on page 18
- Keywords on page 30
- +\*Macros on page 37
- *Number Expressions* on page 33
- *IML Variables* on page 39
- /\*...\*/ *Comments* on page 42

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 14
- '...' (Single Quotes) Canonical Form Expressions on page 15
- <...> (Angle Brackets) Concept Expressions on page 16
- [...] (Square Brackets) Cluster Expressions on page 18

### "..." (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	cats
	cat	

## '...' (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	catalog
'cat'	cats	
	Cats	
	cat's	
	catty	

## <...> (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 part of speech. Valid values are noun, adj

(adjective), verb, and adv (adverb). This identifier is optional. The

default part of speech value is noun.

domain Specifies the *domain* 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></noun.animal.cat>	Cat	catalog
<animal.cat></animal.cat>	cats	
	kitten	

# 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></pos.domain.headword>	No default values.
<headword></headword>	The part of speech value noun and the default domain value application name, 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 Clustert 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	catalog
	dog	
	feline	

## 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 20
- Document (DOC), as described in *DOC Document Operator* on page 20

The following IML range operators apply only to actions:

- Sentence (SENT), as described in SENT Sentence Operator on page 21
- Title (TITLE), as described in *TITLE Title Operator* on page 21
- Subtitle (SUBTITLE), as described in SUBTITLE Subtitle Operator on page 22
- Section (SECTION), as described in SECTION Section Operator on page 22
- Reference (REFERENCE), as described in *REFERENCE Reference Operator* on page 23

#### **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) cat and

hat 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:

expression specifies a valid IML expression

separator specifies a separator, if required (, or AND)

Example:

**Specify** DOC(<cat>,<hat>)

**To match** documents containing both of the concepts (synonyms of) cat and

hat

#### **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:

expression Specifies a valid IML expression

separator Specifies a separator, if required (, or AND)

Example:

Specify SENT(<cat>,<hat>)

**To match** Sentences containing both of the concepts cat and hat

#### **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:

expression specifies a valid IML expression

separator specifies a separator, if required (, or AND)

Example:

Specify TITLE(<cat>,<hat>)

**To match** document titles that contain both of the concepts (synonyms of)

cat and hat

#### **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:

expression Specifies a valid IML expression

separator 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) cat and hat

### **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 arguement.

CHARMATCH assumes implicit BEGIN and END markers to its argument.
CHARMATCH sends its argument to the JAVA regular rxpression 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	cats
	Conneticut	

## **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>)</animal>	cat	Garfield
	dog	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( <anima 1="">)</anima>	cat	sink
	dog	
	garfield	
	odie	

## **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 26
- OR, which specifies the union of two ranges, as described in *OR Union Operator* on page 27
- ISNT, which specifies the difference of two ranges, as described in *ISNT Difference Operator* on page 27
- WITHOUT, which specifies the difference of two specified ranges, as described in WITHOUT Difference Offset Operator on page 29
- OVERLAP, which specifies a range representing the overlap of two ranges, as described in *OVERLAP Offset Intersection Operator* on page 29

## **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 tems must be matched in order for the question pattern to be satisfied. "," and AND must be used in conjunction with *Range Operators* on page 19, 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	dog
	cat with a fat 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:

To match Sentences that contain the concept (synonyms of) cat, excluding

sentences that also include the concept hat

## **WITHOUT Difference Offset Operator**

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

### Syntax:

{expression} WITHOUT {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 include the concept hat

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:

expression Specifies a valid IML expression that the operator will apply to.

Example:

**Specify** SUBTITLE(cat) OVERLAP hat

**To match** Occurrences of hat located within sections that have cat 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 31.
- BEGIN, which matches before the first word in a document, as described in *BEGIN Keyword* on page 31.
- END, which matches after the last word in a document, as described in *END Keyword* on page 32.
- THIS, which assigns a concept sense to one or more tokens in IML expressions within the Dictionary, as described in *THIS Keyword* on page 32.

#### **WORD Keyword**

The WORD keyword matches any, and exactly one word.

#### Syntax:

[expression] WORD [expression]

where:

expression Specifies a valid IML expression

Example:

**Specify** this WORD house

**To match** Any single word within a matched expression, for example:

this old house this red house

And not match this big old house

this house

**NOTE**: You can modify the WORD keyword to match multiple words using number expressions, as described in *Number Expressions* on page 33.

## **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** DOC (BEGIN <cat>)

**To match** Documents having the concept (synonyms of) cat 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) cat 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 potion 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 banking 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 35
- Ascending range number expressions, as described in (...-) Ascending Range on page 36
- Descending range number expressions, as described in (-...) *Descending Range* on page 37

## **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:

- (...-..)Simple Range on page 35
- (...-) Ascending Range on page 36
- (-...) Descending Range on page 37

## (...-...)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) hat in a series of two or

three:

hat hat hat hat hat

**And not match** Single occurrences of the term hat, or a series of four or more

hats

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:

specifies the lower limit of the rangeexpressionSpecifies 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 cat and hat 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 cat and hat 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 38
- + Specifies 1 or more occurrences of an expression. See *One or More Words Macro* on page 38

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 40
- Assigning their values, as described in *Assigning Values to Variables* on page 41
- Referring to them, as described in *Referring to Variables* on page 41

## =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.

If you specify only upper case characters, you can also use the – (hyphen) character.

Global variables can also include the characters:

- \_ (underscore)
- - (hyphen)
- \$
- %

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 43.

## **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 price of product 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:

/\* Specifies the beginning of the comment

comment Specifies the comment, which can be any characters that you want

the Rules Engine to ignore

\*/ Specifies the end of the comment

Example:

**Specify** SENT(<cat>,<hat>)/\* matches sentences that contain either cat or hat \* /

**To add** An explanation to the IML expression

And ensure that The Rules Engine will process only the IML expression

SENT(<cat>,<hat>)

## The Variable Instantiation Language (VIL)

InQuira 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 43. The Rules Engine processes VIL expressions, as described in *VIL Function Processing* on page 43.

## 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:

 $\label{parameter} \label{parameter} \ensuremath{\mbox{\sc variable}} \ensuremath} \ensuremath{\mbox{\sc variable}} \ensuremath} \ensuremath{\mbox{\sc variable}} \ensuremath{\mbox{\sc variable}} \ensuremath{\mbox{\sc variable}} \ensuremath{\mbox{\sc variable}} \ensuremath{\mbox{\sc variable}} \ensuremath{\mbox{\sc variable}} \e$ 

#### 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 46

function Is a valid VIL function, as described in *VIL Functions* on page 48 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 44.

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 52:

```
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 57 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 46 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 46.

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") \mid\mid 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 48
- INHERIT The Inherit Function on page 49
- MORPH The Morphology Function on page 52
- NOVAR The Novar Function on page 53
- ONTOLOGY The Ontology Function on page 54
- REPLACE The Replace Function on page 56
- STRING The String Function on page 57
- TEXT The Text Function on page 59
- USERDATA The User Data Function on page 66
- DATE The Date Function on page 67

#### **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 FALSE.

#### 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.

#### **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],[NOD UPS=value])

where:

TYPE

specifies the required type of search components to be inherited. Possible values are:

#### Index

Index Search Components use IML expressions to define criteria for searching the indexes of unstructured content in the Content Store.

#### **SOL**

SQL Search Components use SQL queries to define criteria for retrieving information from configured structured data sources.

The default value is ALL. See *Intelligent Search Optimization Guide* for more information.

SUBTYPE Specifies a Search Component subtype to be inherited. The default

value is ALL. See *Intelligent Search Optimization Guide* for more

information.

SCORE Specifies the allowed score range of search component levels to be

inherited. The default value is 0.

SEP Specifies an optional separator string to insert between output strings.

This parameter is optional. The default value is null ("").

EXACT 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.

Valid values are true and false. True specifies that the variable range and the search component range must match exactly. The default value is

FALSE.

NODUPS Specifies whether identical search component levels will be inherited

more than once. The default value is FALSE.

#### 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="0") => {{(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

0, 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 55 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
isaDnAllNoun	This option takes concepts as input and returns all child noun concepts that descend from the input concept.
isaSynDnAllNoun	This option takes concepts as input and returns the noun synonyms of all of their children.
isaDnAllVerb	This option takes concepts as input and returns all child verb concepts that descend from the input concept.
isaSynDnAllVerb	This option takes concepts as input and returns the verb synonyms of all of their children as a set of stem words.
isaUpOneNoun	This option takes concepts as input and returns the immediate parent noun concepts.
isaSynUpOneNoun	This option takes concepts as input and returns the immediate parent noun concepts as sets of stem words.
isaDnOneNoun	This option takes concepts as input and returns the immediate child noun concepts.
isaDnTwoNoun	This option takes concepts as input and returns the two levels of child noun concepts.
isaSynDnOneNoun	This option takes concepts as input and returns the immediate child noun concepts as sets of stem words.
isaSynDerDnAllNoun	This option takes concepts as input and returns the noun synonyms of all of their children as a set of stem words.
attrUpOneAdj	This option takes concepts as input and returns the immediate parent adjective concepts, for example, hot -> temperature.
attrSynUpOneAdj	This option takes concepts as input and returns the immediate parent adjective concepts as a set of stem words.
attrUpOneNoun	This option takes concepts as input and returns the immediate parent noun concepts.
partofUpOneNoun	This option takes concepts as input and returns the immediate <i>part-of</i> parent noun concepts.

**partofSynUpOneNoun** This option takes concepts as input and returns the

immediate part-of parent noun concepts as sets of stem

words.

partofSynDnAllNoun This option takes concepts as input and returns the noun

synonyms of all descendant concepts having *part-of* 

relations as a set of stem words.

partofDnAllNoun This option takes concepts as input and returns all of the

descendant concepts having part-of 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 | ALWAYSAFFIX=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.

ALWAYSAFFIX 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:

- The Capitalize Operation on page 60
- The Concatenate Operation on page 61
- The Count Operation on page 61
- *The Lowercase Operation* on page 62
- The Replace Character Operation on page 63
- *The Sort Operation* on page 63
- The Tokenize Operation on page 64
- The Trim Operation on page 65
- The Unique Operation on page 65
- The Uppercase Operation on page 65

### 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**

delimiter

Specifies one or more characters to delimit capitalization. The default is the set of non-alphanumeric characters (for example,

```
~!@#$%^&*()_+=[]\{}|;':",./<>?).
```

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**

ARG1 specifies a prefix string to add to each word in the input string
ARG2 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**

### delimiter

Specifies a character or string within the input to transform to lowercase. The default is the set of non-alphanumeric characters (for example,

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**

ARG1 specifies the character to replace within the input string
ARG2 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**

**ARG1** true specifies case-sensitive sorting. false specifies case-insensitive

sorting. false is the default. Case-sensitive sorting is conducted according

to ASCII sort standards (uppercase letters precede lowercase letters).

ARG2 reverse specifies reverse (z-a) sorting. normal (or any value other than

reverse) 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,  $\sim!@\#$%^*()_+=[]\{}|;':",./<>?)$  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.inquira.com

And return the value: www . inquira . 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:

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

# Chapter 2 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:

4	General Application Product Ordering and Sales Support Intents on page 69
4	General Application Account Support Intents on page 73
4	General Application Customer Service Inquiry Intents on page 77
4	General Application Billing Inquiry and Support Intents on page 79
4	General Application General Company Inquiry Intents on page 84
4	General Application Website Inquiry Intents on page 87

# 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 70

L□ Make Order on page 71

L□ Track Order on page 71

L□ Product Rebates Inquiry on page 72

L□ Warranty Inquiry on page 72

L□ Product Insurance Inquiry on page 73

# **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:

### Make Order

### Product Ordering and Sales Support on page 70

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**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 70

4

**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:

## **Product Rebates Inquiry**

### Product Ordering and Sales Support on page 70

Ь

### **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 70



**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:

### Standard Questions:

n/a

## **Product Insurance Inquiry**

Product Ordering and Sales Support on page 70

**□** 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 74

Update Account Profile on page 74

Close Account on page 75

Account Information Inquiry on page 75

Account Setup Support on page 76

Account Sign In Help on page 76

# **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 74



**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:

### Account Support on page 74

L

**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 74

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**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 Support on page 74

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 74

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:

### 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 77

Contact Customer Service on page 78

Escalate Customer Help on page 78

# **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 on page 77

**L**☐ 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 redisplaying the available self-services tools and support content information.

#### Parameters:

n/a

#### Standard Questions:

n/a

## **Escalate Customer Help**

### Customer Service Inquiry on page 77

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 79

□ Payment Options and Payment Support on page 80

□ Dispute Bill on page 80

□ Balance Inquiry on page 81

□ View Bill Details on page 82

□ Understanding a Bill on page 82

□ Request Bill Copy on page 83

□ Billing Refund Inquiry on page 83

# 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 79

Ч

**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 79



**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 79

Ч

**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:

Billing Inquiry and Support on page 79

**U** 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 79

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 79

Щ

**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 79



**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 84

Office Location Inquiry on page 85

Job Employment Inquiry on page 85

Privacy Inquiry on page 86

Company Business Hours Inquiry on page 87

# **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 84

□ 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 84

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.

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n/a

### Standard Questions:

n/a

## **Privacy Inquiry**

General Company Inquiry on page 84

## 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 safe-guarding 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:

## Company Business Hours Inquiry

General Company Inquiry on page 84

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 87

Website Spanish Language Support on page 88

Website Sitemap Inquiry on page 89

# 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 87

40

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:

## Website Sitemap Inquiry

Website Inquiry on page 87

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**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 89

Your\_Company\_Name Parameter on page 90

### **Products Parameter**

### Used In:

Product Ordering and Sales Support on page 70
Product Rebates Inquiry on page 72

### 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 84

## Description:

Name of company and associated synonyms.

## Root Concept:

noun.customerhelp:Your\_Company\_Name

# Chapter 3 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 91

Automotive Marketing Program Intents on page 107

Automotive Financing and Sales Support Intents on page 110

Automotive Support and Maintenance Intents on page 112

Automotive Customer Service Inquiry Intents on page 116

Automotive General Company Inquiry Intents on page 118

Automotive Website Inquiry Intents on page 120

# **Automotive Product Research Intents**

The following hierarchy describes the Automotive Product Research intents:

Product Research on page 93

4	Vehicle Adaptive Equipment on page 94
L_	Competitive Comparison on page 94
<u>L</u>	Concept Vehicle Inquiry on page 94
4	Fuel Efficiency Research on page 95
4	Environmental Impact Research on page 95
L <sub>0</sub>	Model Price Research on page 96
_ 	Used Vehicle Research on page 96
	Certified Vehicle Research on page 97
4	Vehicle Engineering Research on page 97
<u>L</u>	Vehicle Media Information on page 98
	Model Picture Research on page 98
4	Vehicle Brochure Request on page 99
4	Vehicle Configuration Research on page 99
	Vehicle Accessory Research on page 101
	Model Exterior Color Research on page 101
	Model Interior Color Research on page 102
	Vehicle Option Research on page 102
L_	Vehicle Model Line Research on page 103
L <sub>0</sub>	Vehicle Model Research on page 103
	Vehicle Model Trim Research on page 104
	Forthcoming Model Research on page 105
4	Vehicle Safety Research on page 105
4	Vehicle Specs Research on page 106
	Towing Capacity Specs Research on page 106

## 40

## **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 122

Car Type Parameter on page 123

Competitor Make Parameter on page 124

Competitor Model Parameter on page 124

Concept Car Parameter on page 125

Engineering Feature Parameter on page 126

Forthcoming Model Parameter on page 126

Model Parameter on page 127

Option Package Parameter on page 129

Specification Parameter on page 130

Standard Option Parameter on page 131

Trim Parameter on page 131

Year Parameter on page 132

### Standard Questions:

## Vehicle Adaptive Equipment

Product Research on page 93

**U** 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 93

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 124

Competitor Model Parameter on page 124

### Standard Questions:

n/a

# Concept Vehicle Inquiry

Product Research on page 93

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 103.

#### Parameters:

Concept Car Parameter on page 125

#### Standard Questions:

n/a

## Fuel Efficiency Research

Product Research on page 93

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**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 93

4

**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 93

**L** 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 127

Year Parameter on page 132

## Standard Questions:

n/a

## Used Vehicle Research

Product Research on page 93

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 97, as it does not convey an interest in the certification process.

#### Parameters:

Model Parameter on page 127

Previous Year Parameter on page 130

Non-Certified Year Parameter on page 129

Certified Year Parameter on page 123

## Standard Questions:

n/a

#### **Certified Vehicle Research**

Product Research on page 93

L

Used Vehicle Research on page 96

**U** 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 103 is matched instead.

#### Parameters:

Model Parameter on page 127

Certified Year Parameter on page 123

#### Standard Questions:

n/a

# Vehicle Engineering Research

Product Research on page 93

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 106. Also, it does not apply to questions about concept cars, which instead match *Concept Vehicle Inquiry* on page 94.

#### Parameters:

Engineering Feature Parameter on page 126

## Standard Questions:

n/a

## Vehicle Media Information

Product Research on page 93

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**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 127

Car Type Parameter on page 123

Year Parameter on page 132

## Standard Questions:

n/a

#### **Model Picture Research**

Product Research on page 93

Vehicle Media Information on page 98

4

**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 127

Car Type Parameter on page 123

Year Parameter on page 132

## Standard Questions:

n/a

## Vehicle Brochure Request

Product Research on page 93

L□ Vehicle Media Information on page 98

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 98.

#### Parameters:

Model Parameter on page 127

Year Parameter on page 132

#### Standard Questions:

n/a

# Vehicle Configuration Research

Product Research on page 93

# Description:

This is the parent of the *Vehicle Accessory Research* on page 101, *Model Exterior Color Research* on page 101, *Model Interior Color Research* on page 102 and *Vehicle Option Research* on page 102 intents.

#### Parameters:

Model Parameter on page 127

Year Parameter on page 132

Accessory Parameter on page 122

Standard Option Parameter on page 131

# Option Package Parameter on page 129

# Standard Questions:

## **Vehicle Accessory Research**

Product Research on page 93

Vehicle Configuration Research on page 99

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 127

Year Parameter on page 132

Accessory Parameter on page 122

#### Standard Questions:

n/a

#### **Model Exterior Color Research**

Product Research on page 93

Vehicle Configuration Research on page 99

**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 127

Year Parameter on page 132

#### Standard Questions:

## **Model Interior Color Research**

Product Research on page 93

L

Wehicle Configuration Research on page 99

L

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 102.

#### Parameters:

Model Parameter on page 127

Year Parameter on page 132

#### Standard Questions:

n/a

## **Vehicle Option Research**

Product Research on page 93

L

Vehicle Configuration Research on page 99

L

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 127

Year Parameter on page 132

Standard Option Parameter on page 131

Option Package Parameter on page 129

#### Standard Questions:

## Vehicle Model Line Research

Product Research on page 93

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**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 103 matches instead.

#### Parameters:

Brand Parameter on page 122

#### Standard Questions:

n/a

## Vehicle Model Research

Product Research on page 93

4

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 125

Discontinued Model Parameter on page 126

Year Parameter on page 132

## Standard Questions:

## **Vehicle Model Trim Research**

Product Research on page 93

Vehicle Model Research on page 103

**U** Vehicle Model Trim Research

## Description:

Similar to *Vehicle Model Research* on page 103, but matches on research questions about car models where only the trim is specified.

## Parameters:

Trim Parameter on page 131

## Standard Questions:

## **Forthcoming Model Research**

Product Research on page 93

| □ Vehicle Model Research on page 103

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 126

Year Parameter on page 132

## Standard Questions:

n/a

## Vehicle Safety Research

Product Research on page 93

## 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 127

Car Type Parameter on page 123

Year Parameter on page 132

#### Standard Questions:

## Product Research on page 93

Ь

**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 127

Year Parameter on page 132

Specification Parameter on page 130

#### Standard Questions:

n/a

## **Towing Capacity Specs Research**

Product Research on page 93

Vehicle Specs Research on page 106

Towing Capacity Specs Research

## Description:

Matches questions about towing capacity. This is a child of *Vehicle Specs Research* on page 106; when no towing capacity information is available, this intent will degrade (match its parent) to the latter.

#### Parameters:

Model Parameter on page 127

Year Parameter on page 132

#### Standard Questions:

# Vehicle Type Research

Product Research on page 93

**U** 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 103 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 123

#### Standard Questions:

n/a

# **Automotive Marketing Program Intents**

The following hierarchy describes the Automotive Marketing Program intents:

Marketing Programs on page 107

Merchandise Research on page 108

Racing Sponsorships Inquiry on page 108

L
☐ Special Offer Inquiry on page 109

Vehicle Show Information on page 109

# Marketing Programs

## Description:

Parent intent of the marketing research intents, such as *Merchandise Research* on page 108, *Racing Sponsorships Inquiry* on page 108, *Special Offer Inquiry* on

page 109, and *Vehicle Show Information* on page 109. This intent matches questions about marketing and promotions that are not covered by these more specific intents.

#### Parameters:

Merchandise Parameter on page 127

Model Parameter on page 127

Year Parameter on page 132

## Standard Questions:

n/a

## Merchandise Research

Marketing Programs on page 107

**L**☐ 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 127

#### Standard Questions:

n/a

# Racing Sponsorships Inquiry

Marketing Programs on page 107

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 107

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 130

## Standard Questions:

n/a

## Vehicle Show Information

Marketing Programs on page 107

**Vehicle Show Information** 

## Description:

Matches questions regarding vehicle shows.

#### Parameters:

n/a

## Standard Questions:

# Automotive Financing and Sales Support Intents

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



# 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 110

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 110

**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 111.

#### Parameters:

n/a

## Standard Questions:

n/a

# Vehicle Leasing Research

Financing and Sales Support on page 110

∇ehicle 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:

Financing and Sales Support on page 110 **Vehicle Warranty Research** Description: Matches questions about warranty. This intent does not apply to part- or accessorywarranty questions. It is also distinct from extended warranty and maintenance contract inquiries, which will match Vehicle Extended Warranty Research on page 112. Parameters: n/a Standard Questions: n/a **Vehicle Extended Warranty Research** Financing and Sales Support on page 110 Vehicle Warranty Research on page 112 **Vehicle Extended Warranty Research** 4 Description: Matches questions about extended warranty and maintenance contracts. Parameters:

# Automotive Support and Maintenance Intents

The following hierarchy describes the Automotive Support and Maintenance intents:

Owner Support and Maintenance on page 113

Standard Questions:

n/a

Used Vehicle Market Value Support on page 113

Owner Manual Request on page 114

Radio Security Code Support on page 114

Scheduled Maintenance Support on page 115

Scheduled Maintenance Support on page 115

Vehicle Recall Inquiry on page 116

Vehicle Troubleshooting Support on page 116

# Owner Support and Maintenance

## Description:

This is the parent intent for requests for information or support from owners, including *Scheduled Maintenance Support* on page 115, *Vehicle Recall Inquiry* on page 116, *Radio Security Code Support* on page 114, *Owner Manual Request* on page 114, and *Scheduled Maintenance Support* on page 115.

#### Parameters:

Model Parameter on page 127

Year Parameter on page 132

Maintenance Activity Parameter on page 127

Part Parameter on page 129

#### Standard Questions:

# Used Vehicle Market Value Support

Owner Support and Maintenance on page 113

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 110, 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 96, which is about the current year's models.

#### Parameters:

n/a

#### Standard Questions:

n/a

## **Owner Manual Request**

Owner Support and Maintenance on page 113

**U** 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 127

Year Parameter on page 132

## Standard Questions:

n/a

# Radio Security Code Support

Owner Support and Maintenance on page 113

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:

## Scheduled Maintenance Support

Owner Support and Maintenance on page 113

L

**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 116.

#### Parameters:

Model Parameter on page 127

Year Parameter on page 132

Maintenance Activity Parameter on page 127

#### Standard Questions:

n/a

## Vehicle Parts Research

Owner Support and Maintenance on page 113



**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 127

Year Parameter on page 132

Part Parameter on page 129

#### Standard Questions:

# Vehicle Recall Inquiry

Owner Support and Maintenance on page 113

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**Vehicle Recall Inquiry** 

## Description:

Matches questions about recalls.

#### Parameters:

Model Parameter on page 127

Year Parameter on page 132

## Standard Questions:

n/a

# Vehicle Troubleshooting Support

Owner Support and Maintenance on page 113

4

**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 96

Contact Customer Service on page 117

# $L_{\Box}$

# **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 96

Ь

**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:

## **Escalate Customer Service**

Model Price Research on page 96

**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 118

☐ Dealer Locator Inquiry on page 119
☐ Job Employment Inquiry on page 119

# **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 131 City Parameter on page 124 Zip Code Parameter on page 133

#### Standard Questions:

n/a

# **Dealer Locator Inquiry**

General Company Inquiry on page 118

**□** Dealer Locator Inquiry

# Description:

Matches inquiries about locations of dealerships and service locations.

## Parameters:

State Parameter on page 131

City Parameter on page 124

Zip Code Parameter on page 133

## Standard Questions:

n/a

# Job Employment Inquiry

General Company Inquiry on page 118

**□** Job Employment Inquiry

## Description:

Matches on requests for employment or job application information.

#### Parameters:

n/a

#### Standard Questions:

# Automotive Website Inquiry Intents

The following hierarchy contains the Automotive Website Inquiry intents:

Website Inquiry on page 120

Website Sitemap Inquiry on page 120

Website Spanish Language Support on page 121

# 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 120

**U** 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:

## Standard Questions:

n/a

## Website Spanish Language Support

Website Inquiry on page 120

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 122

Brand Parameter on page 122

Car Type Parameter on page 123

Certified Year Parameter on page 123

City Parameter on page 124

Competitor Make Parameter on page 124

Competitor Model Parameter on page 124

Concept Car Parameter on page 125

Current Year Parameter on page 125

Discontinued Model Parameter on page 126

Engineering Feature Parameter on page 126

Forthcoming Model Parameter on page 126

Current Model Parameter on page 125

Maintenance Activity Parameter on page 127

Merchandise Parameter on page 127

Model Parameter on page 127

Non-Certified Year Parameter on page 129

Option Package Parameter on page 129

Part Parameter on page 129

Previous Year Parameter on page 130

Special Offer Parameter on page 130

Specification Parameter on page 130

Standard Option Parameter on page 131

State Parameter on page 131

*Trim Parameter* on page 131

Year Parameter on page 132

Zip Code Parameter on page 133

# **Accessory Parameter**

#### Used In:

Product Research on page 93

Vehicle Configuration Research on page 99

Vehicle Accessory Research on page 101

## Description:

Names of vehicle accessories.

## Root Concept:

noun.artifact:accessory

## **Brand Parameter**

#### Used In:

Vehicle Model Line Research on page 103

## 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 93

Vehicle Media Information on page 98

Model Picture Research on page 98

Vehicle Safety Research on page 105

Vehicle Type Research on page 107

## 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 96 Certified Vehicle Research on page 97

## 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 118

Dealer Locator Inquiry on page 119

## Description:

The city.

## Root Concept:

noun.location:city

# **Competitor Make Parameter**

#### Used In:

Product Research on page 93

Competitive Comparison on page 94

## 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 93

Competitive Comparison on page 94

## 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 93

Concept Vehicle Inquiry on page 94

## 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 103

## 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 107

## Description:

The current model year.

## Root Concept:

noun.auto.model:current\_year

## **Discontinued Model Parameter**

#### Used In:

Vehicle Model Research on page 103

# Description:

Names of discontinued models.

## Root Concept:

noun.auto.model:discontinued\_model

# **Engineering Feature Parameter**

#### Used In:

Product Research on page 93
Vehicle Engineering Research on page 97

## Description:

Name of the engineering feature.

# Root Concept:

noun.auto:engineering\_feature

# Forthcoming Model Parameter

#### Used In:

Product Research on page 93
Forthcoming Model Research on page 105

## 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 113 Scheduled Maintenance Support on page 115

## 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 107
Merchandise Research on page 108

## Description:

Name of merchandise item.

## Root Concept:

noun.artifact:merchandise

## Model Parameter

#### Used In:

Product Research on page 93

Certified Vehicle Research on page 97

Marketing Programs on page 107

Model Exterior Color Research on page 101

Model Interior Color Research on page 102

Model Picture Research on page 98

Model Price Research on page 96

Owner Support and Maintenance on page 113

Owner Manual Request on page 114

Radio Security Code Support on page 114

Scheduled Maintenance Support on page 115

Towing Capacity Specs Research on page 106

Used Vehicle Market Value Support on page 113

Used Vehicle Research on page 96

Vehicle Accessory Research on page 101

Vehicle Brochure Request on page 99

Vehicle Configuration Research on page 99

Vehicle Extended Warranty Research on page 112

Vehicle Media Information on page 98

Vehicle Option Research on page 102

Scheduled Maintenance Support on page 115

Vehicle Recall Inquiry on page 116

Vehicle Safety Research on page 105

Vehicle Specs Research on page 106

Vehicle Troubleshooting Support on page 116

Vehicle Warranty Research on page 112

## Description:

The vehicle model name.

## Root Concept:

noun.cognition:model3

## Non-Certified Year Parameter

#### Used In:

Used Vehicle Research on page 96

## 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 99

## 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 113 Scheduled Maintenance Support on page 115

## Description:

Names of vehicle parts.

## Root Concept:

noun.auto:car\_part

## Previous Year Parameter

#### Used In:

Certified Vehicle Research on page 97

## 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 109

## Description:

The name of the special offer or program.

## Root Concept:

noun.customerhelp:special\_offer

# Specification Parameter

#### Used In:

Product Research on page 93
Vehicle Specs Research on page 106

## Description:

The vehicle specification.

## Root Concept:

noun.communication:specification

# Standard Option Parameter

#### Used In:

Product Research on page 93
Vehicle Configuration Research on page 99
Vehicle Option Research on page 102

# Description:

The name of the standard equipment option.

# Root Concept:

noun.auto:auto\_standard\_option

# State Parameter

# Used In:

General Company Inquiry on page 118

Dealer Locator Inquiry on page 119

# Description:

The (USA) state.

# Root Concept:

noun.location:American\_state

# Trim Parameter

#### Used In:

Vehicle Model Trim Research on page 104

# Description:

The name of the trim element.

# Root Concept:

noun.auto.model:trim

#### Used In:

Product Research on page 93

Certified Vehicle Research on page 97

Marketing Programs on page 107

Model Exterior Color Research on page 101

Model Interior Color Research on page 102

Model Picture Research on page 98

Model Price Research on page 96

Owner Support and Maintenance on page 113

Owner Manual Request on page 114

Radio Security Code Support on page 114

Scheduled Maintenance Support on page 115

Towing Capacity Specs Research on page 106

Used Vehicle Market Value Support on page 113

Used Vehicle Research on page 96

Vehicle Accessory Research on page 101

Vehicle Brochure Request on page 99

Vehicle Configuration Research on page 99

Vehicle Extended Warranty Research on page 112

Vehicle Media Information on page 98

Vehicle Option Research on page 102

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Vehicle Recall Inquiry on page 116

Vehicle Safety Research on page 105

Vehicle Specs Research on page 106

Vehicle Troubleshooting Support on page 116

Vehicle Warranty Research on page 112

# Description:

The model year.

# Root Concept:

# Zip Code Parameter

# Used In:

General Company Inquiry on page 118

Dealer Locator Inquiry on page 119

# Description:

The zip code.

# Root Concept:

noun.location:zip\_code

# Chapter 4 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 136

Telecom Product Support Intents on page 155

Telecom Product Ordering and Sales Support Intents on page 183

Telecom Account Support Intents on page 187

Telecom Customer Service Intents on page 190

Telecom Billing and Support Intents on page 195

Telecom General Company Inquiry Intents on page 200

Telecom Website Inquiry Intents on page 203

# 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 138

Service Plan Research on page 138

Internet Services Research on page 139

Prepaid Services Research on page 139

Service Feature Research on page 140

	L_	Text Messaging Research on page 141
	L_	Instant Messaging Research on page 141
	L_	Email Management Research on page 142
	L_	Calling Areas / Coverage Research on page 143
	L_	Roaming and Cell Phone Network Research on page 143
	L_	Voicemail Management Research on page 144
	L_	Personalization and Content Management Research on page 144
		Ringtones Research on page 145
	L_	Service Plan Minutes Research on page 146
		Purchasing Minutes Research on page 146
	L_	Call Services Research (including Star Keys) on page 147
		Call Block Research on page 148
		Caller ID Research on page 148
-	Addit	ional Line or Phone Request Research on page 149
-	Phone	e Equipment Research on page 149
	L_	Wireless Phone Research on page 150
		Camera Phone Research on page 151
		PDA Research on page 151
	L_	Non-Wireless Phone Research on page 152
	L_	Phone Equipment Accessory and Parts Research on page 153
-	Other	Telco Services Research on page 153
	$L_{\square}$	International Calling Research on page 154
	L_	Calling Card Research on page 154
	40	Disabled Services Research on page 155

# **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 276

#### Service Plan Research

Product Research on page 138



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 209

#### Standard Questions:

Service Plan Research Standard Questions on page 286

#### **Internet Services Research**

Product Research on page 138

L□ Service Plan Research on page 138

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 206
- Internet Services Parameter on page 206

#### Standard Questions:

Internet Services Research Standard Questions on page 253

#### **Prepaid Services Research**

Product Research on page 138

L□ Service Plan Research on page 138

□ 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 207

#### Standard Questions:

Prepaid Services Research Standard Questions on page 273

#### Service Feature Research

Product Research on page 138

**□** 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 282

# **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 292

### **Instant Messaging Research**

Product Research on page 138

Service Feature Research on page 140

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 249

### **Email Management Research**

Product Research on page 138

☐ Service Feature Research on page 140

**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 247

# Calling Areas / Coverage Research

Product Research on page 138

Service Feature Research on page 140

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 fto coverage area maps and network layouts.

#### Parameters:

n/a

#### Standard Questions:

Calling Areas And Coverage Research Standard Questions on page 233

#### Roaming and Cell Phone Network Research

Product Research on page 138

Service Feature Research on page 140

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 281

# **Voicemail Management Research**

Product Research on page 138

Service Feature Research on page 140

**U** 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 300

#### **Personalization and Content Management Research**

Product Research on page 138

☐ Service Feature Research on page 140

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:

Ringtones Research

Personalized Content Parameter on page 208

#### Standard Questions:

Personalization and Content Management Research Standard Questions on page 263

Product Research on page 138

Service Feature Research on page 140

Personalization and Content Management Research on page 144

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 280

#### **Service Plan Minutes Research**

Product Research on page 138

L□ Service Feature Research on page 140

L□ 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 284

Purchasing Minutes Research
Product Research on page 138

Service Feature Research on page 140

Service Plan Minutes Research on page 146

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 276

### Call Services Research (including Star Keys)

Product Research on page 138

| □ Service Feature Research on page 140

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 205

#### Standard Questions:

Call Services Research Standard Questions on page 231

#### Call Block Research

Product Research on page 138

Service Feature Research on page 140

Call Services Research (including Star Keys) on page 147

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 229

Caller ID Research

Product Research on page 138

Service Feature Research on page 140

Call Services Research (including Star Keys) on page 147

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 233

# Additional Line or Phone Request Research

Product Research on page 138

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 219

# Phone Equipment Research

Product Research on page 138

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 210

#### Standard Questions:

Phone Equipment Research Standard Questions on page 269

#### **Wireless Phone Research**

Product Research on page 138

L
☐ Phone Equipment Research on page 149

─ 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 206

#### Standard Questions:

Wireless Phone Research Standard Questions on page 303

Camera Phone Research

Product Research on page 138

Phone Equipment Research on page 149

Wireless Phone Research on page 150

**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/manufacturer 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 235

#### PDA Research

Product Research on page 138

Phone Equipment Research on page 149

Wireless Phone Research on page 150

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 207

# Standard Questions:

PDA Research Standard Questions on page 262

#### Non-Wireless Phone Research

Product Research on page 138

Phone Equipment Research on page 149

**☐** 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 207

#### Standard Questions:

Non-Wireless Phone Research Standard Questions on page 257

# **Phone Equipment Accessory and Parts Research**

Product Research on page 138

Phone Equipment Research on page 149

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 208

Telecom Parts Parameter on page 209

#### Standard Questions:

Phone Equipment Accessory and Parts Research Standard Questions on page 267

## Other Telco Services Research

Product Research on page 138

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 138

Other Telco Services Research on page 153

# 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 251

#### Calling Card Research

Product Research on page 138

☐ Other Telco Services Research on page 153

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 235

#### **Disabled Services Research**

Product Research on page 138

Other Telco Services Research on page 153

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:

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# **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 209

# Service Plan Support

Product Support on page 157

**L** 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 209

#### Standard Questions:

Service Plan Support Standard Questions on page 290

#### **Internet Services Support**

Product Support on page 157

| □ Service Plan Support on page 158

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 206
Internet Services Parameter on page 206

#### Standard Questions:

Internet Services Support Standard Questions on page 255

### **Prepaid Services Support**

Product Support on page 157

L□ Service Plan Support on page 158

# 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 208

#### Standard Questions:

Prepaid Services Support Standard Questions on page 274

# **Change Plans**

Product Support on page 157

L□ Service Plan Support on page 158

L□ 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 237

#### **Change Service Providers**

Product Support on page 157

L□ Service Plan Support on page 158

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 210

#### Standard Questions:

Change Service Providers Standard Questions on page 239

# **Relocation Support**

Product Support on page 157

L□ Service Plan Support on page 158

**□** 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 157

L□ Service Plan Support on page 158

L□ 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 290

#### **Cancel Plan**

Product Support on page 157

Service Plan Support on page 158

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 237

# **Contract Expiration Support**

Product Support on page 157

L

Service Plan Support on page 158

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 244

# Service Feature Support

Product Support on page 157

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 284

# **Text Messaging Support**

Product Support on page 157

L

Service Feature Support on page 163

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**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 ancilliary portlets on all messaging features.

#### Parameters:

n/a

#### Standard Questions:

Text Messaging Support Standard Questions on page 294

# **Instant Messaging Support**

Product Support on page 157

L□ Service Feature Support on page 163

L□ 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 157

L□ Service Feature Support on page 163

**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 248

### **Calling Areas / Coverage Support**

Product Support on page 157

Service Feature Support on page 163

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 157

L□ Service Feature Support on page 163

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 282

### **Voicemail Management Support**

Product Support on page 157

L□ Service Feature Support on page 163

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 302

### **Personalization and Content Management Support**

Product Support on page 157

L

Service Feature Support on page 163

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 208

### Standard Questions:

Personalization and Content Management Support Standard Questions on page 266

# Ringtones Support Product Support on page 157 Service Feature Support on page 163 Personalization and Content Management Support on page 168 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 281

### **Service Plan Minutes Support**

Product Support on page 157

L□ Service Feature Support on page 163

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 286

Purchasing Minutes Support

Product Support on page 157

| □ Service Feature Support on page 163

Service Plan Minutes Support on page 169

**□** 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 276

# **Call Services Support (Star Keys)**

Product Support on page 157

Service Feature Support on page 163

Service Plan Minutes Support on page 169

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 205

### Standard Questions:

Call Services Support Standard Questions on page 231

Call Block Support

Product Support on page 157

L□ Service Feature Support on page 163

L□ Call Services Support (Star Keys) on page 170

**□** 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 229

# Caller ID Support

Product Support on page 157

Call Services Support (Star Keys) on page 170

**□** 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 233

# Additional Line or Phone Request Support

Product Support on page 157

**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 220

# Phone Equipment Support

Product Support on page 157

**□** 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 210

### Standard Questions:

Phone Equipment Support Standard Questions on page 271

### **Wireless Phone Support**

Product Support on page 157

☐ Phone Equipment Support on page 173

Wireless Phone Support

# Description:

Matches on support 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 looking for detail support on wireless phones.

#### Parameters:

Cell Phones Parameter on page 206

### Standard Questions:

Wireless Phone Support Standard Questions on page 305

Wireless Camera Phone Support

Product Support on page 157

Phone Equipment Support on page 173

Wireless Phone Support on page 173

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/manufacturer 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 157

Phone Equipment Support on page 173

Wireless Phone Support on page 173

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/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 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 263

### **Non-Wireless Phone Support**

Product Support on page 157

Phone Equipment Support on page 173

Non-Wireless Phone Support

# Description:

Matches on support 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 looking for support on using non-wireless phones.

### Parameters:

Landline Phones Parameter on page 207

### Standard Questions:

Non-Wireless Phone Support Standard Questions on page 257

# **Phone Equipment Accessory and Parts Support**

Product Support on page 157

L
→ Phone Equipment Support on page 173

☐ 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 208

Telecom Parts Parameter on page 209

### Standard Questions:

Phone Equipment Accessory and Parts Support Standard Questions on page 269

# **Upgrade Phone**

Product Support on page 157

Phone Equipment Support on page 173

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 206

### Standard Questions:

Upgrade Phone Standard Questions on page 299

### **Unlock Phone Password Codes**

Product Support on page 157

Phone Equipment Support on page 173

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 296

### **Phone Equipment Documentation**

Product Support on page 157

Phone Equipment Support on page 173

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 271

# Other Telco Services Support

Product Support on page 157

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 157

U

☐ Other Telco Services Support on page 178

□ 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 253

# **Calling Card Support**

Product Support on page 157

L
☐ Other Telco Services Support on page 178

**□** 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 235

# **Disabled Services Support**

Product Support on page 157

☐ Other Telco Services Support on page 178

**□** 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 157

☐ Other Telco Services Support on page 178

**□** 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 246

### **Number Portability Inquiry**

Product Support on page 157

U

☐ Other Telco Services Support on page 178

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 257

# **Area/Country Lookup**

Product Support on page 157

U

☐ Other Telco Services Support on page 178

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 220

### **Reverse Number Lookup**

Product Support on page 157

☐ Other Telco Services Support on page 178

☐ 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 279

# Telecom Product Ordering and Sales Support Intents

The following hierarchy contains the Telecom Product Ordering and Sales Support Intents:

Produ	ct Ordering and Sales Support on page 184
4	Make Order on page 184
4	Track Order on page 185
4	Product Rebates Inquiry on page 185
L <sub>0</sub>	Warranty Inquiry on page 186
l n	Product Insurance Inquiry on page 186

# **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 184



**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 255

Product Ordering and Sales Support on page 184

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**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 294

# **Product Rebates Inquiry**

Product Ordering and Sales Support on page 184

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**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 209

### Standard Questions:

Product Rebates Inquiry Standard Questions on page 274

### Product Ordering and Sales Support on page 184

**U** 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 206

### Standard Questions:

n/a

# Product Insurance Inquiry

Product Ordering and Sales Support on page 184

□ 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 209

### Standard Questions:

n/a

# **Telecom Account Support Intents**

The following hierarchy contains the Telecom Account Support Intents:

Account Support on page 187

Update Account Profile on page 188

Close Account on page 188

Account Information Inquiry on page 189

Account Setup Support on page 189

Account Sign In Help on page 190

# 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 218

# **Update Account Profile**

### Account Support on page 187

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**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 296

# Close Account

Account Support on page 187

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**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 240

# **Account Information Inquiry**

Account Support on page 187

# 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 212

# Account Setup Support

Account Support on page 187

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 214

# Account Sign In Help

Account Support on page 187

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 214

# **Telecom Customer Service Intents**

The following hierarchy contains the Telecom Customer Service Intents:

Customer Service Inquiry on page 191

Contact Customer Service on page 191

Schedule Service Appointment on page 192

Escalate Customer Help on page 192

Report Abuse/Fraud on page 193

∟ Report Network/Signal Problem on page 194

Report Lost Phone on page 194

# **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 244

### Contact Customer Service

Customer Service Inquiry on page 191

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 redisplaying the available self-services tools and support content information.

### Parameters:

n/a

### Standard Questions:

Contact Customer Service Standard Questions on page 242

# Schedule Service Appointment

Customer Service Inquiry on page 191

**□** 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 282

# **Escalate Customer Help**

Customer Service Inquiry on page 191

**L** 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 fustrated 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 249

# Report Abuse/Fraud

Customer Service Inquiry on page 191

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 277

# Report Network/Signal Problem

### Customer Service Inquiry on page 191

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 277

# Report Lost Phone

Customer Service Inquiry on page 191

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 277

# Telecom Billing and Support Intents

The following hierarchy contains the Telecom Billing and Support Intents:		
Billing and Support Inquiry on page 195		
4	Payment Options and Payment Support on page 196	
4	Dispute Bill on page 196	
4	Balance Inquiry on page 197	
4	View Bill Details on page 197	
4	Understanding a Bill on page 198	
4	Request Bill Copy on page 199	
40	Billing Refund Inquiry on page 199	

# 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 225

# Payment Options and Payment Support

Billing and Support Inquiry on page 195

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 259

# Dispute Bill

Billing and Support Inquiry on page 195

∟ 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 247

# **Balance Inquiry**

Billing and Support Inquiry on page 195

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**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 220

### View Bill Details

Billing and Support Inquiry on page 195



**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 300

# Understanding a Bill

Billing and Support Inquiry on page 195

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**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 296

# Request Bill Copy

Billing and Support Inquiry on page 195

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**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 279

# Billing Refund Inquiry

Billing and Support Inquiry on page 195

**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 229

# Telecom General Company Inquiry Intents

The following hierarchy contains the Telecom General Company Inquiry Intents:

General Company Inquiry on page 200

☐ Office Location Inquiry on page 201

☐ Job Employment Inquiry on page 201

☐ Privacy Inquiry on page 202

☐ Company Business Hours Inquiry on page 202

# 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 210

### Standard Questions:

General Company Inquiry Standard Questions on page 249

General Company Inquiry on page 200

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 259

# Job Employment Inquiry

General Company Inquiry on page 200

**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 255

### General Company Inquiry on page 200

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 safe-guarding 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 274

# Company Business Hours Inquiry

General Company Inquiry on page 200

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 242

# **Telecom Website Inquiry Intents**

The following hierarchy contains the Telecom Website Inquiry Intents:

Website Inquiry on page 203

Website Spanish Language Support on page 204

Website Sitemap Inquiry on page 204

# 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 Inquiry on page 203

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 303

# Website Sitemap Inquiry

Website Inquiry on page 203

\_ 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 205

Cell Phones Parameter on page 206

Internet Services Parameter on page 206

Internet Plans Parameter on page 206

Landline Phones Parameter on page 207

Pay As You Go Plans Parameter on page 207

PDA Parameter on page 207

Personalized Content Parameter on page 208

Prepaid Phone Cards Parameter on page 208

Telecom Accessories Parameter on page 208

Telecom Parts Parameter on page 209

Telecom Products Parameter on page 209

Your Company Name Parameter on page 210

## Call Services Parameter

#### Used In:

Call Services Research (including Star Keys) on page 147 Call Services Support (Star Keys) on page 170

## 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 177

Warranty Inquiry on page 186

Wireless Phone Research on page 150

Wireless Phone Support on page 173

## 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 139
Internet Services Support on page 158

#### 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 139
Internet Services Support on page 158

#### Description:

Names of internet services provided by the company and typical industry names.

#### Root Concept:

noun.telecom:internet\_service

## Landline Phones Parameter

#### Used In:

Non-Wireless Phone Research on page 152 Non-Wireless Phone Support on page 175

## 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 159

## Description:

Names of pay-as-you-go plans.

## Root Concept:

noun.telecom:pay\_as\_you\_go

## **PDA Parameter**

#### Used In:

PDA Research on page 151

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 144
Personalization and Content Management Support on page 168

## 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 159

# 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 153
Phone Equipment Accessory and Parts Support on page 176

# 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 153
Phone Equipment Accessory and Parts Support on page 176

# 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 186
Product Rebates Inquiry on page 185
Product Support on page 157

# 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 138 Service Plan Support on page 158

#### 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 160

# Description:

Names of companies offering telecom products.

# Root Concept:

noun.telecom:service\_provider

# **Telephones Parameter**

#### Used In:

Phone Equipment Research on page 149
Phone Equipment Support on page 173

## Description:

Parent concept for all phones.

# Root Concept:

noun.artifact:telephone

# Your Company Name Parameter

#### Used In:

General Company Inquiry on page 200

# 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 187

Account Information Inquiry on page 189

#### Standard Questions

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 origal 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 187

Account Setup Support on page 189

### 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 iwould like to swich 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 sighn up fo 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 187

Account Sign In Help on page 190

#### Standard Questions

i can't access my long distance bill with my current user id and passwork

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 passwprd 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 inwhen 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 pagssword 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 iget my passward 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 iaccess my account

how do i resset my passward

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 cantilog 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 on page 187

#### Standard Questions

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e-mail addres 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

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 138

Additional Line or Phone Request Research on page 149

#### Standard Questions:

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 157

L

Additional Line or Phone Request Support on page 172

### 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 157

L

Other Telco Services Support on page 178

Area/Country Lookup on page 182

#### Standard Questions

area code

i need the city code for salamanca spain

area code avalibility

# **Balance Inquiry Standard Questions**

Billing and Support Inquiry on page 195

L

Balance Inquiry on page 197

#### Standard Questions

i received my bill after you took out the payment.

i wnat 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 tellme 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 to be getting higher need to talk to some one about billing problen? 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 195

## 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 wnat 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 dident 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 problen? 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 giveme 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 doen'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 ststement 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 195

□ Billing Refund Inquiry on page 199

#### 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 138

Service Feature Research on page 140

Call Services Research (including Star Keys) on page 147

Call Block Research on page 148

#### 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 157

- - Call Services Support (Star Keys) on page 170
    - ∟ Call Block Support on page 171

#### 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 138

Service Feature Research on page 140

Land Call Services Research (including Star Keys) on page 147

# 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 157

Service Feature Support on page 163

Service Plan Minutes Support on page 169

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☐ Call Services Support (Star Keys) on page 170

## 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

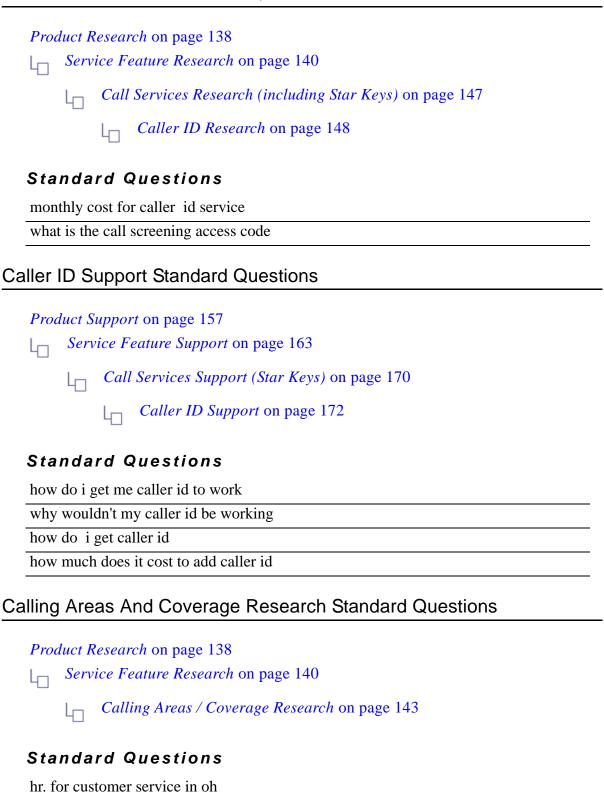
how do i get caller id

how much does it cost to add caller id

what number do i use to set up call forwading

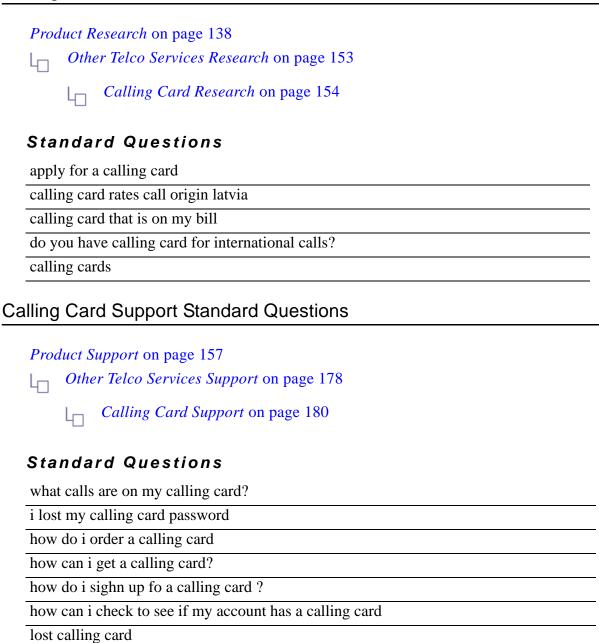
how does call forward work

## Caller ID Research Standard Questions



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



# Camera Phone Research Standard Questions

how do you activate a cell phone with a calling card?

Product Research on page 138

☐ Phone Equipment Research on page 149

- Um Wireless Phone Research on page 150
  - ∟ Camera Phone Research on page 151

#### Standard Questions

picture	nhono
111011111	111111111111111111111111111111111111111
picture	PHOHES

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 157

Phone Equipment Support on page 173

Wireless Phone Support on page 173

Wireless Camera Phone Support on page 174

#### Standard Questions

why can't i send and recieve picture messages from my camera phone?

# Cancel Plan Standard Questions

Product Support on page 157

Service Plan Support on page 158

∟ Cancel Plan on page 162

#### 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 157

- ∟ Service Plan Support on page 158
  - ∟ Change Plans on page 160

#### Standard Questions

can i sign up for home phone service iwould like to swich 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 157

Service Plan Support on page 158

Change Service Providers on page 160

#### 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 sevice

check on new service

can i change to your company, and keep th same number?

Account Support on page 187

Close Account on page 188

## Standard Questions

otanuara questions
teminating 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
at this point I am so frustrated, I in ready to cancer 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 200

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Company Business Hours Inquiry on page 202

#### Standard Questions

what hours are the call center open from

sevrice 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 191

Contact Customer Service on page 191

#### 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 diretly.

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 adminstrator

coustomer 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

d oyouu have another way i can get a hold of a person who works their other than useing 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 157

L

L

Service Plan Support on page 158

Contract Expiration Support on page 163

#### 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 idoes my service expire?

when does my contract expire

## **Customer Service Inquiry Standard Questions**

Customer Service Inquiry on page 191

#### 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 directly.
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 157

Other Telco Services Support on page 178

Directory Info Support on page 181

#### Standard Questions

old number 954 646-4445 nedd new #	
how can i change my number	

	now can a 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 195

Dispute Bill on page 196

#### 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 138

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Service Feature Research on page 140

Email Management Research on page 142

#### 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 157

L□ Service Feature Support on page 163

Email Management Support on page 165

#### 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**

#### 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 200

#### Standard Questions

home office address

corporate headquarters address

## Instant Messaging Research Standard Questions

Product Research on page 138

Service Feature Research on page 140

Instant Messaging Research on page 141

#### 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 siemans cf62t?
how to stop aim pop ups

## International Calling Research Standard Questions

Product Research on page 138

Other Telco Services Research on page 153

International Calling Research on page 154

#### Standard Questions

service	ın 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 fron 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?

scottland 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 internationallu does t mobile cover the dominician 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 157

Other Telco Services Support on page 178

International Calling Support on page 179

#### 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 138

Service Plan Research on page 138

Internet Services Research on page 139

#### 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 157

Service Plan Support on page 158

Internet Services Support on page 158

#### 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 200

L

→ Job Employment Inquiry on page 201

#### Standard Questions

how can i aplyfor a job?????

job opportuniteies

#### Make Order Standard Questions

Product Ordering and Sales Support on page 184

L
☐ Make Order on page 184

ouy mind	ites online
purchase	phones online
on-Wirel	ess Phone Research Standard Questions
Product	Research on page 138
∟ Pho	one Equipment Research on page 149
L <sub>0</sub>	Non-Wireless Phone Research on page 152
Standa	ard Questions
can you p	please give me more infromation about the 5840 cordless phone.
	ess Phone Support Standard Questions
	Support on page 157
└ Pho	one Equipment Support on page 173
4	Non-Wireless Phone Support on page 175
Standa	ard Questions
why do i	get static intermittently on my 5.8 ghz phones ?
	ortability Inquiry Standard Questions
umber P	ortability inquiry Standard Questions
	Support on page 157
Product	

## 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 200

☐ Office Location Inquiry on page 201

#### 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 195

Payment Options and Payment Support on page 196

#### 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 disconneted. 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 paymant 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 doen'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 onlne

when i clik 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

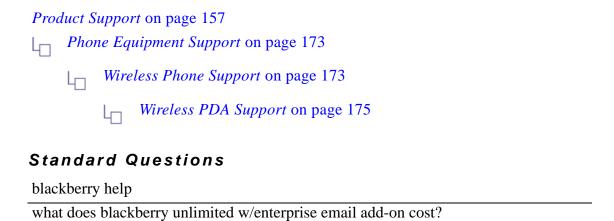
Prod	ct Research on page 138
L_	Phone Equipment Research on page 149
	Um Wireless Phone Research on page 150
	PDA Research on page 151

### Standard Questions

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**



Personalization and Content Management Research Standard

## Questions

Product Research on page 138

Service Feature Research on page 140

Personalization and Content Management Research on page 144

## 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 pictuer 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 megatones
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 157

Service Feature Support on page 163

Personalization and Content Management Support on page 168

#### Standard Questions

		•	1 .		11 0
how do i	erase	nicfures	saved to	mv	alhum'
now do i	Crasc	pictures	savea to	, 111 A	aibuiii.

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 138

L

□ Phone Equipment Research on page 149

Phone Equipment Accessory and Parts Research on page 153

## Standard Questions

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	
accesseries 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 accessiries	
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 havecell pone 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 157

Phone Equipment Support on page 173

Phone Equipment Accessory and Parts Support on page 176

#### 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 138

Phone Equipment Research on page 149

#### 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

Proc	duct Support on page 157
4	Phone Equipment Support on page 173
	Phone Equipment Documentation on page 178

#### 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 157

Phone Equipment Support on page 173

□ Phone Equipment Support on page 173

#### Standard Questions

why has my phone been disconnected?

how do i recieve 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 diconnected?

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 phones 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 roming charges ho can i recieve email from my siemens tmodile phone? can i change my current phone? why doesnt my phone get service? how do i change me 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 anothe phone? why cant my d415 phone recieve wallpaper? no service-need to check messages from another phone, how to do this?

## Prepaid Services Research Standard Questions

Product Research on page 138

L

Service Plan Research on page 138

Prepaid Services Research on page 139

## 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 157
Service Plan Support on page 158
Prepaid Services Support on page 159
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 200
Privacy Inquiry on page 202
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 184
Product Rebates Inquiry on page 185
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 samung 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

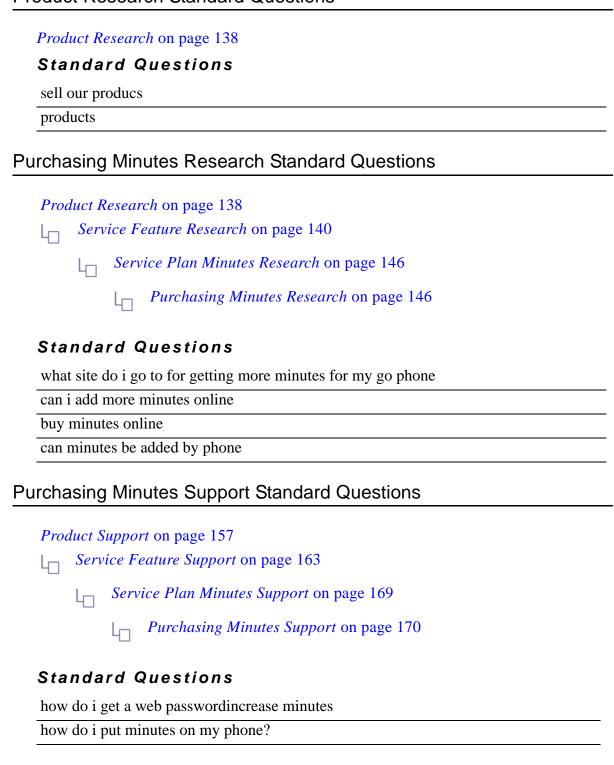
rebate for upgrading 6010

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**



## Report Abuse Or Fraud Standard Questions

Customer Service Inquiry on page 191

Report Abuse/Fraud on page 193

#### Standard Questions

hi allie, what is the code to punch in so unwanted callers are blocked?

how do i email you becuase 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 191

Report Lost Phone on page 194

### 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 191

Report Network/Signal Problem on page 194

### 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 195

Request Bill Copy on page 199

#### 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 157

Other Telco Services Support on page 178

Reverse Number Lookup on page 183

#### Standard Questions

513-678-7777

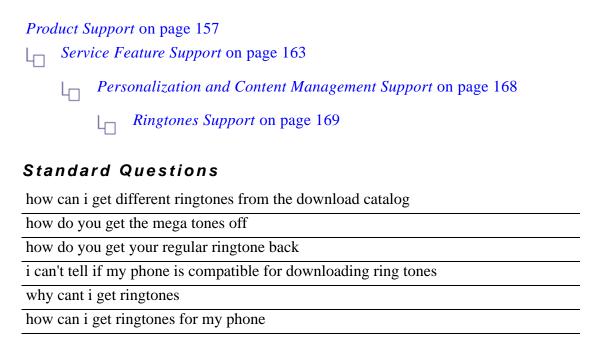
6173317777

# Ringtones Research Standard Questions

i want more ringtones where should i go to buy them

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Service Feature Research on page 140
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Ringtones Research on page 145
Otan dayd Ovastiana
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

# **Ringtones Support Standard Questions**



# Roaming and Cell Phone Network Research Standard Questions

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Service Feature Research on page 140

Roaming and Cell Phone Network Research on page 143

#### 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



messge e-mail notification
check my home e-mail messages
can i veiew 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 157

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Service Feature Support on page 163

#### 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 138

Service Feature Research on page 140

∟ Service Plan Minutes Research on page 146

#### 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 consided night minuts

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 157

Service Feature Support on page 163

Service Plan Minutes Support on page 169

#### 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 cellphine

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

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Service Plan Research on page 138

## Standard Questions

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 unlimted 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 157

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Service Plan Support on page 158

#### 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 157

| □ Service Plan Support on page 158

#### Standard Questions

why has my phone been disconnected?

no dial tone is my service disconnected

my phone is disconneted. 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 disconect 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 138

Service Feature Research on page 140

Text Messaging Research on page 141

## Standard Questions

i want to send a text message from the computer
text messages
i want to send one sms
phone phonesinstant messanger
how much does text messaging cost?
text messsages
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 157

| □ Service Feature Support on page 163

Text Messaging Support on page 164

#### 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 184

L

Track Order on page 185

#### 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 195

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Understanding a Bill on page 198

#### 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 157

Phone Equipment Support on page 173

Unlock Phone Password Codes on page 177

#### Standard Questions

what does puk code stand for?

how do i fix a puk

unllock

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 187

Update Account Profile on page 188

#### 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 recogonized? 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 updated e-mail address: d2453@comcast.net. 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 157

L□ Phone Equipment Support on page 173

L□ Upgrade Phone on page 177

## Standard Questions

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 195

L

View Bill Details on page 197

#### 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 wnt to check my call history how od i check my call history

calls made by me

# Voicemail Management Research Standard Questions

Product Research on page 138

Service Feature Research on page 140

Voicemail Management Research on page 144

#### 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

retrieve saved voice mail from other phone

## Voicemail Management Support Standard Questions

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☐ Service Feature Support on page 163

Voicemail Management Support on page 167

#### 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 203

#### 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 203

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Website Spanish Language Support on page 204

### Standard Questions

puedo enviar mensajes gratis

## Wireless Phone Research Standard Questions

Product Research on page 138

Phone Equipment Research on page 149

Wireless Phone Research on page 150

### 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 157

Phone Equipment Support on page 173

Wireless Phone Support on page 173

### Standard Questions

how do i activate my new cell phone?

my x105 does not work in taiwan

check my minutes on my cellphine

Swhat kind cable wire do i need to be able to down load 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 dont know how to send pictures in any mobile phones