INQUIRA™
Customers ▸ Answers ▸ Impact™

Intelligent Search Language Reference

Contents

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:

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 *InQuira Customer Support* 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 Language Reference	IS80-LRG-00	This guide is for language developers 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.
Intelligent Search User Interface Guide	IS80-UI-00	This guide is intended for application 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 VIL.

IML and VIL Quick Reference

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 cat	cats

'...' (Single Quotes) Canonical Form Expressions

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

Syntax:

Specify canonical form expressions using either of the following forms:

```
expression
'expression'
```

where:

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

Example:

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

<...> (Angle Brackets) Concept Expressions

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

Syntax:

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

 `<pos.domain.name>`

Other valid forms are:

 `<name>`

where:

`pos`	Specifies the concept's *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> <animal.cat>	Cat cats kitten	catalog

Default Concept Reference Values

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

If you specify…	the Rules Engine assigns…
`<pos.domain.headword>`	No default values.
`<headword>`	The part of speech value `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 preceeding character optional. For more information, search for Java Regex guides online.

Syntax:

CHARMATCH(regular expression)

Example:

The expression…	matches…	and does not match…
CHARMATCH(“c+ ?t”)	cat Conneticut	cats

CHILDREN Children Operator

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

Syntax:

CHILDREN(<conceptname>)

Example:

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

ALLCHILDREN All Children Operator

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

Syntax:

ALLCHILDREN(<conceptname>)

Example:

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

Combining Operators

Combining operators specify operations on expressions or their associated ranges.

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

The following combining operators are valid in IML:

- `IS`, which specifies the intersection of two ranges, as described in *IS Intersection Operator* on page 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) SENT(cat AND dog)	cat dog dog with cat cat with a fat dog	cat dog

ISNT Difference Operator

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

Syntax:

{expression} ISNT {expression}

where:

expression   Specifies a valid IML expression

Example:

Specify   SENT(<cat>) ISNT SENT(<hat>)

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.

S y n t a x :

{expression} NOOVERLAP {expression}

where:

expression   Specifies a valid IML expression

E x a m p l e :

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

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.

S y n t a x :

END expression

where:

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

E x a m p l e :

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.

S y n t a x :

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:

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

Example:

Specify	cat WORD(2-) hat
To match	Occurrences of the specified expressions cat and hat having intervening words within the specified range or two or more:

> cat and the hat
> cat and the red hat

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

> cat and hat

(-...) Descending Range

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

Syntax:

  expression(-n)

where:

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

Example:

| **Specify** | cat WORD(-2) hat |
| **To match** | Occurrences of the specified expressions `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 . The Rules Engine processes VIL expressions, as described in .

VIL Syntax

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

You specify VIL expressions in the form:

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

where:

`variable`	Is an optional variable passed to the function for instantiation
`operator`	Is a valid VIL operator, as described in *-> || VIL Operators and Delimiters* on page 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") || 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.
>
> **SQL**
> 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 O, which generates the original wordform used in the request.

SEP   Specifies an optional separator string to insert between output strings. This parameter is optional. The default value is OR.

Example:

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

A="Accounting"

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

A->MORPH(FORMS="IP")

The Rules Engine processes the MORPH function and generates:

account OR accounts

NOVAR The Novar Function

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

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

where:

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

Example:

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

```
(<username>=username OR <account_id>)
```

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

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

which generates the string Valued Customer.

ONTOLOGY The Ontology Function

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

Syntax:

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

where:

EXACT	Specifies to use only concepts that encompass the exact range of tokens as the instantiated variable; the concept is therefore an exact match for the variable. Valid values are TRUE and FALSE. The default is FALSE.
CONTAINED	Specifies to use concepts that are contained within the range of tokens that make up the instantiated variable, for example a variable consisting of four tokens where tokens 2 and 3 denote a concept.
TRAVERSAL	Specifies the option that determines the direction and distance that the function will travel to generate output. See *Ontology Traversal Functions* on page 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 *part-of* 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, `~!@#$%^&*()_+=[]\{}|;':",./<>?`) 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:

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

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

Make Order

⌐▢   **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

⌐▢   **Track Order**

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

Product Rebates Inquiry

Product 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

Warranty Inquiry

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

Product Insurance Inquiry

└☐ **Product 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

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

User Account Profile

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

Close Account

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 Information Inquiry

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

Account Setup Support

Account 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 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

n/a

General Application Customer Service Inquiry Intents

The following hierarchy contains the General Customer Service Inquiry Intents:

Customer Service Inquiry

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

Contact Customer Service

Contact Customer Service

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

Escalate Customer Help

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

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

⌐□   **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

⌐□   **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

Balance Inquiry

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

View Bill Details

Billing Inquiry and Support on page 79

    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

└☐ **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

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.

Parameters:

n/a

Standard Questions:

n/a

Privacy Inquiry

Privacy Inquiry

Description:

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

Configuration Recommendations:

Answer configuration for this intent should be to provide information around the company's policies for 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:

n/a

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 Spanish Language Support

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

n/a

Website Sitemap Inquiry

⌐□ **Website 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

Used In:

Description:

The range of the products offered by the company.

Root Concept:

noun.artifact:merchandise

Your_Company_Name Parameter

Used In:

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

The following hierarchy describes the Automotive Product Research intents:

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:

Standard Questions:

n/a

Vehicle Adaptive Equipment

└☐   **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

└☐   **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:

Standard Questions:

n/a

Concept Vehicle Inquiry

└☐   **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

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

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

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:

Standard Questions:

n/a

Used Vehicle Research

Used Vehicle Research

Description:

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

Parameters:

Intelligent Search Language Reference

Certified Year Parameter on page 123

Standard Questions:

n/a

Certified Vehicle Research

Product Research on page 93

      ⌐▫   *Used Vehicle Research* on page 96

             ⌐▫   **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
⌐ **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

⌐ **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

n/a

Vehicle Brochure Request

Product Research on page 93

└□   *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

└□   **Vehicle Configuration Research**

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

Standard Questions:

n/a

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:

n/a

Model Interior Color Research

Product Research on page 93

    Vehicle Configuration Research on page 99

        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

    Vehicle Configuration Research on page 99

        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:

n/a

Vehicle Model Line Research

⌐□   **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

⌐□   **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:

n/a

Vehicle Model Trim Research

Product Research on page 93

      └☐   *Vehicle Model Research* on page 103

                 └☐   **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:

n/a

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

└□　　**Vehicle Safety Research**

Description:

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

Parameters:

Model Parameter on page 127

Car Type Parameter on page 123

Year Parameter on page 132

Standard Questions:

n/a

└☐ **Vehicle Specs Research**

Description:

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

Parameters:

Standard Questions:

n/a

Towing Capacity Specs Research

└☐

└☐ **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:

Standard Questions:

n/a

Vehicle Type Research

└□ **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:

Standard Questions:

n/a

Automotive Marketing Program Intents

The following hierarchy describes the Automotive Marketing Program intents:

└□ *Merchandise Research* on page 108

└□ *Racing Sponsorships Inquiry* on page 108

└□ *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

⌐□   **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:

n/a

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

└☐ **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

└□　　**Vehicle Leasing Research**

Description:

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

Parameters:

n/a

Standard Questions:

n/a

Vehicle Warranty Research

Vehicle Warranty Research

Description:

Matches questions about warranty. This intent does not apply to part- or accessory-warranty questions. It is also distinct from extended warranty and maintenance contract inquiries, which will match .

Parameters:

n/a

Standard Questions:

n/a

Vehicle Extended Warranty Research

Vehicle Extended Warranty Research

Description:

Matches questions about extended warranty and maintenance contracts.

Parameters:

n/a

Standard Questions:

n/a

Automotive Support and Maintenance Intents

The following hierarchy describes the Automotive Support and Maintenance intents:

Intelligent Search Language Reference

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

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:

n/a

Scheduled Maintenance Support

Owner Support and Maintenance on page 113

⌐⌐   **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:

n/a

Vehicle Recall Inquiry

└☐   **Vehicle Recall Inquiry**

D e s c r i p t i o n :

Matches questions about recalls.

P a r a m e t e r s :

S t a n d a r d   Q u e s t i o n s :

n/a

Vehicle Troubleshooting Support

└☐   **Vehicle Troubleshooting Support**

D e s c r i p t i o n :

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

P a r a m e t e r s :

n/a

S t a n d a r d   Q u e s t i o n s :

n/a

Automotive Customer Service Inquiry Intents

The following hierarchy describes the Automotive Customer Service intents:

└☐

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

Contact Customer Service

Description:

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

Parameters:

n/a

Standard Questions:

n/a

└☐   **Escalate Customer Service**

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

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:

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:

n/a

Automotive Website Inquiry Intents

The following hierarchy contains the Automotive Website Inquiry intents:

└▢

└▢

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 Sitemap Inquiry**

Description:

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

Parameters:

n/a

Standard Questions:

n/a

Website Spanish Language Support

Website Inquiry on page 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

Used In:

Description:

Names of vehicle accessories.

Root Concept:

noun.artifact:accessory

Brand Parameter

Used In:

Description:

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

Root Concept:

noun.auto.model:parent_company_make

Car Type Parameter

Used In:

Description:

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

Root Concept:

noun.auto.model:car_type

Certified Year Parameter

Used In:

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

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.

R o o t   C o n c e p t :

noun.auto:car_part

Previous Year Parameter

U s e d   I n :

Certified Vehicle Research on page 97

D e s c r i p t i o n :

The year prior to the current model year.

R o o t   C o n c e p t :

noun.auto:model_year

Special Offer Parameter

U s e d   I n :

Special Offer Inquiry on page 109

D e s c r i p t i o n :

The name of the special offer or program.

R o o t   C o n c e p t :

noun.customerhelp:special_offer

Specification Parameter

U s e d   I n :

Product Research on page 93
Vehicle Specs Research on page 106

D e s c r i p t i o n :

The vehicle specification.

R o o t   C o n c e p t :

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

Year Parameter

Description:

The model year.

Root Concept:

noun.auto:model_year

Zip Code Parameter

Used In:

Description:

The zip code.

Root Concept:

noun.location:zip_code

Intelligent Search Language Reference

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

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

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

    ⌐□   *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

    ⌐□   *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

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:

Instant Messaging Research

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

└▫ **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:

Personalized Content Parameter on page 208

Standard Questions:

Personalization and Content Management Research Standard Questions on page 263

Ringtones Research

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

Service Plan Minutes Research

Product Research on page 138

└▫ *Service Feature Research* on page 140

      └▫ **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:

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

└ **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:

Caller ID Research

└ **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

Additional Line or Phone Request Research

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

Phone Equipment Research

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

└▫ *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

⌐ **International Calling Research**

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

International Calling Research Standard Questions on page 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:

Product Support on page 157

    Service Plan Support on page 158

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:

Service Plan Support

⌐□　　　**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:

Standard Questions:

Internet Services Support

⌐□　*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

⌐⌐ *Service Plan Support* on page 158

⌐⌐ **Prepaid Services Support**

Description:

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

Configuration Recommendations:

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

Parameters:

Prepaid Phone Cards Parameter on page 208

Standard Questions:

Prepaid Services Support Standard Questions on page 274

Change Plans

Product Support on page 157

└ *Service Plan Support* on page 158

    └ **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

└ *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

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

⌐ *Service Plan Support* on page 158

⌐ **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

└□ *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

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

Instant Messaging Support

D e s c r i p t i o n :

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.

C o n f i g u r a t i o n   R e c o m m e n d a t i o n s :

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.

P a r a m e t e r s :

n/a

S t a n d a r d   Q u e s t i o n s :

n/a

Email Management Support

Email Management Support

D e s c r i p t i o n :

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

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

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

⌐ *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

⌐

⌐

⌐ **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:

Service Plan Minutes Support

⌐

⌐ **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

            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

  Service Feature Support on page 163

    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

⌐⊐   **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:

Standard Questions:

Wireless Phone Support

⌐⊐

⌐⊐   **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

└▫ **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:

Non-Wireless Phone Support

└▫ **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

⌐ *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

⌐ **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:

Calling Card Support

Product Support on page 157

    ⌐ *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

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

└☐   *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

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

└☐

└☐ **Reverse Number Lookup**

D e s c r i p t i o n :

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

C o n f i g u r a t i o n   R e c o m m e n d a t i o n s :

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.

P a r a m e t e r s :

n/a

S t a n d a r d   Q u e s t i o n s :

Telecom Product Ordering and Sales Support Intents

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

└☐

└☐

└☐

└☐

└☐

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

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:

Track Order

Product Ordering and Sales Support on page 184

⌐ **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

⌐ **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

Warranty Inquiry

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 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 Account Support Intents

The following hierarchy contains the Telecom Account Support Intents:

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:

Update Account Profile

⌐ **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:

Close Account

⌐ **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

    Account Information Inquiry

Description:

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

Configuration Recommendations:

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

Parameters:

n/a

Standard Questions:

Account Information Inquiry Standard Questions on page 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

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:

Contact Customer Service

⌐ **Contact Customer Service**

Description:

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

Configuration Recommendations:

Answer configuration for this intent should be to provide all available means for communicating with customer services. Consider also providing information in

contacting other departments (e.g. billing, system administration). Also consider re-displaying the available self-services tools and support content information.

Parameters:

n/a

Standard Questions:

Contact Customer Service Standard Questions on page 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

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

└▢   **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 Lost Phone

└▢   **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

Telecom Billing and Support Intents

The following hierarchy contains the Telecom Billing and Support Intents:

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

 ⌐ **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:

Understanding a Bill

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:

Request Bill Copy

ㄴ□   **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:

Billing Refund Inquiry

ㄴ□   **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:

Telecom General Company Inquiry Intents

The following hierarchy contains the Telecom General Company Inquiry Intents:

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:

Standard Questions:

Office Location Inquiry

└□   **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:

Job Employment Inquiry

└□   **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:

Privacy Inquiry

└▢   **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:

Company Business Hours Inquiry

└▢   **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

Telecom Website Inquiry Intents

The following hierarchy contains the Telecom Website Inquiry Intents:

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 usethe company's website and to deal with the most common errors encountered in using the website. Consider including sign-in help information and other online transactional support content for the more frequent questions (e.g., online banking, online payment, etc.) as content on secondary portlets. Also consider providing information for internet services support, in case the customer is not referring to the company's website (but errors/problems with accessing other websites through the company's internet services).

Parameters:

n/a

Website Spanish Language Support

└□   **Website 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 Sitemap Inquiry

└□   **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

Used In:

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

noun.telecom:internet_plan

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

Standard Questions

e-mail addres i enter does not match the address on my account

unable to log onto account

how do i check who my long distance carrier is

how do i get my user id?

it wont accept the user id

i enter my phone number for user id and system says it dose not match records

i have resey my password x 2 and cannot access my account please advise i n

i do not have an account

i do not remember what my user id was

how can i start a new account

i entered my home phone as the user id

dsl account

where can i find my account number

i can not set my password or id number for my account

how can i talk to a real person about my account?

how do i add my wireless account to online billpay?

still can not access my account

how do i create my account

how can i access my on-hold account

nothing is matching the 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

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

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 in-
when i try and log in the system keeps saying my phone number is wrong, why
forgot phone pin number
how do i change the phone number
need help with my password
password is invalid and i need to update my email address
they never gave me a password for online i need to check how many min. i ha
i have never been able to log on. my e-mail address is febbecke@hotmail.co
i still cant reset my password.
can you help with my paqssword
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 cant i log on
how do i get my password
the password you sent doesn't work.
513-678-7777
log in with different phone number?
log in
change password
i am in ireland and have a signal but cannot get through to any phone number - local ireland nor us - how shouls i be dialling?
6173317777
how do i reset my log in
set up a password
how do i reset a password that i forgot
my password wont enter
i'm trying to set up my voice mail a/c. when i get connected they do not prompt me to set anything up, just ask for the ten digit phone number of the person i'm trying to reach. help!
log in by name
password will not work

Account Support Standard Questions

Standard Questions

account setting

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

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

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

Standard Questions

area code
i need the city code for salamanca spain
area code avalibility

Balance Inquiry Standard Questions

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 t o 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

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

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

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

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

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

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

Standard Questions

monthly cost for caller id service

what is the call screening access code

Caller ID Support Standard Questions

Standard Questions

how do i get me caller id to work

why wouldn't my caller id be working

how do i get caller id

how much does it cost to add caller id

Calling Areas And Coverage Research Standard Questions

Standard Questions

hr. for customer service in oh

what national coverage i have?
lynchburg va in service area?
coverage for alaska
coverage maps
can i use my phone in las vegas?
what frequency for local coverage
personal coverage
what is digital coverage

Calling Card Research Standard Questions

Standard Questions

apply for a calling card

calling card rates call origin latvia

calling card that is on my bill

do you have calling card for international calls?

calling cards

Calling Card Support Standard Questions

Standard Questions

what calls are on my calling card?

i lost my calling card password

how do i order a calling card

how can i get a calling card?

how do i sighn up fo a calling card ?

how can i check to see if my account has a calling card

lost calling card

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

Camera Phone Research Standard Questions

Intelligent Search Language Reference

Standard Questions

picture phones
how about if i want two camera phones
cameras
cf62t camera attachment
let me see camera phones
wifi phone camera

Camera Phone Support Standard Questions

Product Support on page 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

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

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?

Close Account Standard Questions

Standard 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
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

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

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 dirctly.
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

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

Standard Questions

customerservice.com
hr. for customer service in oh
i tried to pay my bill on the web but it says that the name is wrong for th
italian customer support
customer service 800 number
what is the number to customer service?
what is your customer service number
what is your costomer service telephone number?
what number do i call to talk to customer service
how can i reach customer service by phone
number for customer service

can you give me a 800 customer service number i can call
can i have the customer service telephone number?
why can't i talk to a customer service person dirctly.
what is the phone number for customer service
coustomer service phone number
give me a phone number to your customer service
phone number customer service
how do i email about poor customer service
customer service agreement
how do i contact customer service using my phone
what if i have lost my sales receipt and customer service agreement papers?
customer service contact
contact customer care
customer care from my phone

Directory Info Support Standard Questions

Standard Questions

old number 954 646-4445 nedd new #

how can i change my number

unpublished number

no dial tone is my service disconnected

how do i get an unlisted number?

local telephone directory

how do i check local access numbers for dial-up internet service?

can i remove the ability to use directory assistance from my phone?

what is the telephone assistance program?

could you give me that number again?

toll free numbers

give me number for manchester ct. office

phone listing

directory assistance?

what number do i dial to get voicemail from a foreign country?

find people

411 serviceas

i have a added number

how do i view multiple numbers

copy multiple numbers

can i use a number from another phone

whats my sms number?

service number

serial number

Dispute Bill Standard Questions

Standard Questions

i think this is the wrong bill you sent me, i received this one last month

Email Management Research Standard Questions

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

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

Standard Questions

home office address
corporate headquarters address

Instant Messaging Research Standard Questions

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

Standard Questions

service in kuwait

i need the city code for salamanca spain

will you have india on your unlimited international plan sometime

to call from us to spain and back what plain is cheapest

how much are international calls per minute?

overseas call information

is there an international call-home calling card.

can i call international without online

how much does it cost to make a call 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

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

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

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

Standard Questions

how can i aplyfor a job?????
job opportuniteies

Make Order Standard Questions

Make Order on page 184

Standard Questions

buy minutes online

purchase phones online

Non-Wireless Phone Research Standard Questions

Standard Questions

can you please give me more infromation about the 5840 cordless phone.

Non-Wireless Phone Support Standard Questions

Standard Questions

why do i get static intermittently on my 5.8 ghz phones ?

Number Portability Inquiry Standard Questions

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

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

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

PDA Research 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

Standard Questions

blackberry help
what does blackberry unlimited w/enterprise email add-on cost?

Personalization and Content Management Research Standard

Questions

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

Standard Questions

how do i erase pictures saved to my album?

how can i get different ringtones from the download catalog

how do i download the internet manager

how do i get my wallpaper on my phone

how do you get your regular ringtone back

i can't tell if my phone is compatible for downloading ring tones

why i can't receive pictures messges on my handset

how do i sign in to my album

set up picture album

how do i keep picture

how do i download phone numbers to my cell phone?

how can i put up my email pictures that were lost because i had to reset my phone.

why cant i get ringtones

why am i unable to download a song to my phone

how do i upload picture from my phone onto my computer?

download upgrade

why can't i download hifi ringers?

how can i send a picture from my album to my phone?

can't download picture message

how do you email pictures

how can i get ringtones for my phone

how do you play games

i dont know how to send pictures in any mobile phones

how do you download wallpaper

why cant my d415 phone recieve wallpaper?

Phone Equipment Accessory and Parts Research Standard Questions

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

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

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

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

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

Standard Questions:

privacy screener
i want to turn on privacy directory on my home phone

Product Rebates Inquiry Standard Questions

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

Standard Questions

sell our producs

products

Purchasing Minutes Research Standard Questions

Standard Questions

what site do i go to for getting more minutes for my go phone

can i add more minutes online

buy minutes online

can minutes be added by phone

Purchasing Minutes Support Standard Questions

Standard Questions

how do i get a web passwordincrease minutes

how do i put minutes on my phone?

Report Abuse Or Fraud Standard Questions

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

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

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

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

Standard Questions

513-678-7777

6173317777

Ringtones Research Standard Questions

Standard Questions

is caller tunes free for the first month
where to find caller tunes
sample ringtones
saving a ringtone to sim card
ringtunes
downloading caller tunes
what kind cable wire do i need to be able to down load ring tones on my pc for motorola v600?
additional megatones
group ringtones
voice ringers
wi fi ring tones
indian ring tone
what do you do to delete a ring tone that you have downloaded?
buy a new caller tune
free ringtones?
how to get ringtones
can i put different ringtones with different people in my phonebook?
download ringtones
can i listen to ringtones free
my ring tones have been deleted
how to download ringtones over the internet
want to hear the mega tone choices
ringtones with free wallpaper
i want more ringtones where should i go to buy them

Ringtones Support Standard Questions

Standard Questions

how can i get different ringtones from the download catalog

how do you get the mega tones off

how do you get your regular ringtone back

i can't tell if my phone is compatible for downloading ring tones

why cant i get ringtones

how can i get ringtones for my phone

Roaming and Cell Phone Network Research Standard Questions

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

Standard Questions

how do we get our gprs to work?

ipaq+gprs settings

Schedule Service Appointment Standard Questions

Standard Questions

how do i recieve repairs work on my phone

how do i schedule a repair?

what is the repair number?

how can i cancel an appointment to have a tech come to house?

can i get a repairman to fix phone?

what is the phone number for repair service?

Service Feature Research Standard Questions

Standard Questions

what number do i call to retrieve messages?

can you get copies or hear old deleted messages

what local service features do you provide

sending messages over the internet

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

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

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

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

Service Plan Research on page 138

Standard Questions

get local service only

what is the time limit on the nights and weekends long distance plan?

is there a 30 minute plan for 3.00

is there a way to bundle a cell phone with the new advantage program

will you have india on your unlimited international plan sometime

cellphone data plans

is long distance plans mandatory

payment plans

contract for voip

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

what are your long distance plans

what is the best calling plan for me?

local plans

cellular service

what international plans are offered?

start a home phone service

where do i look for a new phone plan

can i make an international call on my home plan?

do you provide business phone service

does ny unlimited calling plan now include canada?

can you be 17 to open a contract

cellular services

price for unlimited local and long distance plan?

i would like know about cell phone service and phone for same use.

question about standard dsl service plan

how much is a local plan?

what plan allows me to call so. cal any time of the day cheapest rate?

i'd like more details on international plans

why i see only one phone from my family plan

family plan

what is the smart access rate plan

when is my year contract done

do you have a plan that includes 600 minutes, free nights and weekends fr., sat. and sun.
samsung d500 on contract
can i have a $19.99 plan with this phone?
plans available for existing customers
contract?
do you need a sidekick plan to use a sidekick
do family time plans have free roaming and long distance?
can i switch to a different plan when on a contract?
do you get a free phone with basic plan
does it matter what phone you get if you have pay as you go?
plans for the blackberry 7230
what time does 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

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

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

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

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

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

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

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

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

Standard Questions

phone upgreade

upgrade policy

how do i upgrade

updating phones

2for 1 price handset upgrade

when can i upgrade

pocket pc update

why am i getting screwed while trying to upgrade to a newer phone??

how can a upgrade my phone online

how do i upgrade my phone i have now?

what phones can i upgrade to?

upgrade telephones

do i have a handset upgrade available

how long do you have to have your phone to upgrade?

2003 updates

upgrade device

how can i upgrade?

can i get a free upgrade on my phone?

rebate for upgrading 6010

when can i upgrade my phone without being expensive

want to upgrade

i want to upgrade, can i

phone upgrade pricing

View Bill Details Standard Questions

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

Standard Questions

voice mail access number
what number do i call to retrieve messages?
what's my default voice mail password
what is the number to call to access my voice mail
what is the number to access voice mail
what is the website to get the voicemail email notification?

do you have a featurw where i can retrieve voice mail messages online?
do you have an automated answering service?
can i send a voice mail message to anyone?
what is the toll free voicemail access number
i would like my voicemail to let me know date and time of call
how to access voice mail?
home phone voice mail how many rings before vm answeres
accessing my voicemail
this is my e- mail address
what number do i dial to get voicemail from a foreign country?
voicemail and password
how to make a voice mail
retrieve saved voice mail
retrieving voice mail from other phone

Voicemail Management Support Standard Questions

Product Support on page 157

    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

Standard Questions

puedo enviar mensajes gratis

Wireless Phone Research Standard Questions

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

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