

**BigFix Version 10.0.1  
Relevance Guide**



# Special notice

Before using this information and the product it supports, read the information in [Notices \(on page 560\)](#).

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# Chapter 1. The Relevance Language

The scope of the Relevance Language is to retrieve and manipulate information by means of Inspectors.

There are two types of relevance language:

## **Client Relevance Language**

Used to interrogate locally the client system to retrieve information. Such information can be used to run analysis, to substitute variables in action scripts, to determine applicability relevance and success criteria, and to generate automatic computer groups.

## **Session Relevance Language**

Used to retrieve information from the BigFix database. This information can be displayed in custom dashboards or web reports, or used to integrate with external applications.

Both types of relevance language share the same basic syntax and constructs, named Core Inspectors.

**Note:** If you are new to this language, first watch the introductory video [Exploring the Relevance Language](#).

# Chapter 2. Guides

The relevance guides on this manual provide you with self-lead training on the relevance language.

It is divided into three different parts:

- Core Inspectors to access the syntax and constructs of the inspectors that are common to both languages.
- Client Relevance to access the part dedicated to the Client Relevance Inspectors.
- Session Relevance to access the part dedicated to the Session Relevance Inspectors.

**Note:** To follow along with these guides and with the Tutorial, download and use either the Fixlet Debugger for Windows platforms or the QnA for other platforms.

## Core Inspectors

Begin learning about the syntax and constructs that are common to both the Client and the Session Relevance languages.

You can create and test your custom Relevance queries locally on the Client system using the Fixlet Debugger or on the Linux CentOS interactive sandbox available under Online Evaluator.

If you own a BigFix Lifecycle or a BigFix Compliance version 9.5 Patch 2 or later license, you can run your Client Relevance Language queries on the target clients also directly from the WebUI using the BigFix Query Application. For more information, click [Get Started with BigFix Query](#).

### Strings

The basic building blocks of the relevance language are numbers, strings, and the expressions that combine them.

The "Q:" is the relevance query that is being run and the "A:" is the answer to your query. Queries can be complex and answers to a queries can be of any type, but more on that soon!

Strings are sets of characters (a-z,0-9,!@#)\$) that are surrounded by quotes. The output of the following query is the string "hello world"

- **Q:**"hello world"
- **A:** hello world

### String Operations

- **Q:** substrings separated by "-"of"an-over-hyphenated-string"
- **A:** an
- **A:** over
- **A:** hyphenated
- **A:** string

Note in the example above that four values were returned, not just one. This output is typical of a plural inspector like `substrings`. You can filter this list with a `whose` statement:

- **Q:** (substrings separated by " "of"who observed what happened, when and where?")  
whose (itcontains"w")
- **A:** who
- **A:** what
- **A:** when
- **A:** where?

This example shows two clauses in parentheses. The first parenthetical clause creates a list of words (substrings separated by a space). This `whose` clause contains the primary keyword `it` (described in greater detail below), that can stand in for another object – in this case, `it` stands in for each of the individual words, and the expression returns just those words that contain the letter 'w'. How many of these substrings are there?

- **Q:** number of (substrings separated by " "of"who observed what happened, when and where?") whose (itcontains"w")
- **A:** 4

This expression shows how you can count the number of items returned and filtered from a plural inspector. As these examples show, you can get either singular or plural items back from a Relevance expression. What about no items at all? That's a subject for the next section.

## Escaping

Literal strings like this are parsed for one special character: the percent sign. This is an escape character that encodes for other, non-printable characters, specifically control characters and delete. When a percent sign is found, the encoding expects the next two characters to be hex digits producing a one-byte hex value. This hex value is then added to the internal representation of the string, allowing you incorporate otherwise unavailable characters into a string. Because the percent is used as the escape key, to actually get a percent into a string you must use %25, the hex value for percent. To convert back to an escaped string for output, characters with a hex value less than 0x20, greater than 0x7E, or equal to 0x25 are printed as escaped characters, for example %25.

## Introspectors

You can inspect the language itself using inspectors called introspectors.

Here are some example queries to try:

```
properties whose (it as string contains "file")

properties whose (result type of it = type "file")

properties of type "file"

casts
```



```

unary operators

binary operators

binary operators returning (type "integer")

properties

```

If you evaluate the last one, `properties`, most of the items at the top of the list are the core types and introspectors.

## Properties

All objects have properties and those properties can be inspected and referenced. An example of a property of an object might be its size or length. There are thousands of property inspectors available to cover the majority of software and hardware features of Windows, Mac, and UNIX systems.

These are different ways that you can use to list the properties of an object you can query using an inspector:

- Navigate the area of interest that the inspector belongs to and then click the inspector name.
- Query the inspector, for example "string", from the Fixlet Debugger or the QnA tool using an *introspector* called "properties of type". This page explains how to use this introspector.

```

Q: properties of type "string"
A: sets of <string>: string set
A: length of <string>: integer
A: concatenations of <string>: string
A: ....

```

A string has over 150 properties that you can query!

You can query its length:

```
Q: length of string "test"  
A: 4
```

... and you can hash the string:

```
Q: SHA256 of string "test"  
A: 9f86d081884c7d659a2feaa0c55ad015a3bf4f1b2b0b822cd15d6c15b0f00a08
```

You can query the properties of date objects like the day of the week:

```
Q: day_of_week of current date  
A: Tuesday
```

.. and you can get the current year:

```
Q: year of current date  
A: 2015
```

You can query the number of processors our system has:

```
Q: number of processors  
A: 2
```

And you can query their speed:

```
Q: speeds of processors  
A: 3093000000 hertz
```

You can also query aspects of the local system

```
Q: names of local groups  
A: Administrators  
A: Backup Operators  
A: Guests
```

Watch the video about the [Property of an Object](#) to have more information about this clause.

## Arithmetic Operations

Integers are numbers (0-9) without a decimal place. Integers are not wrapped in quotes. You can write a relevance query whose answer is a number

```
Q: 6000
```

```
A: 6000
```

## Simple Operators

The normal operators you would expect to be able to use with numbers work in the Relevance Language. These are a few samples:

```
Q: (8+3)*6
```

```
A: 66
```

Operations are run in sequence from left to right, ensure you use parentheses to group operations that must be run before others.

Pay attention to not mix strings and integers, for example:

```
Q: ("8" + "3") * 6
```

```
E: The operator "plus" is not defined.
```

This happens because "8" and "3" are strings and the + symbol is not a valid operator for strings. To *add strings* or *create time ranges*, use the concatenation and the & symbol.

```
Q: "8" & "3"
```

```
A: 83
```

You can use arithmetic operators also with data types, for example:

```
Q: 36*month/2
```

```
A: 1 year, 6 months
```

```
Q: december - current month
```

```
A: 3 months
```

## Concatenations

The ampersand (&) symbol represents the concatenation operator. You can use it to join strings:

```
Q: "now" & "then"
A: nowthen
```

and to create time ranges:

```
Q: now & day
A: Mon, 04 Apr 2016 22:13:27 +0200 to Tue, 05 Apr 2016 22:13:27 +0200
```

While in the first example `"now"` represents a string, because it is enclosed in double quotes, in the second example `now` is a relevance keyword that you can use to extract the current time and date from the system clock.

## Relations

You use relations to compare values in the Relevance language. There are the standard alpha and numeric comparators (`=`, `!=`, `<`, `>`, `>=`, `<=`) as well as a few strictly string relations (starts with, ends with, contains, is contained by).

Relations return a Boolean `TRUE` or `FALSE` depending on the outcome of the comparison.

Here are some examples of expressions that use relations:

```
Q: 1 < 2
A: True

Q: "the whole" is greater than "the sum of the parts"
A: True

Q: "nowhere" starts with "now"
A: True

Q: "nowhere" ends with "here"
A: True

Q: "nowhere" contains "her"
A: True
```

```
Q: "he" is contained by "nowhere"  
A: True
```

## Casting

Values can be converted into other types, making it easy to create, concatenate, and combine inspectors into complex expressions.

You can convert strings into integers:

```
Q: "500" as integer  
A: 500
```

You can use the converted integers in math:

```
Q: ("500" as integer) * 5  
A: 2500
```

You can convert integers to strings:

```
Q: 500 as string  
A: 500
```

... and you can use concatenate to add text to your integers that you converted to strings:

```
Q: 500 as string & " hertz"  
A: 500 hertz
```

You can work with dates:


```
Q: "01 Apr 2020" as date  
A: Wed, 01 Apr 2020
```

You can turn the number of a month back into the name of the month:

```
Q: 5 as month  
A: May
```

... and shorten the name of the month to its 3 or 4 letter abbreviation:

```
Q: january as three letters
A: Jan
```

 **Note:** The Relevance Debugger casts values to strings in order to print them. If an object does not result in a string, the debugger uses the `as string` method of the object to turn it into a string. If the object can't be cast as a string, an error message is displayed.

## Exists

`Exists` is an important keyword that returns `True` or `False` based on the existence of the specified object. This is an important technique that lets you test for existence before you test for a value and possibly incur an error. The keyword has two slightly different typical uses. The first is to determine whether a singular object specified by an inspector exists:

```
Q: exists drive "c:"
A: True
```

```
Q: exists drive "z:"
A: False
```

The above examples test for the existence of the specified objects on the client computer. In these examples, you can see that the client has a drive `c:`, but not a drive `z:`. Attempting to find out more about the non-existent drive can generate an error. If you aren't sure about the existence of an object, use the `exist` keyword before you attempt to examine its properties.

The second usage is to determine whether a *plural* result contains any values:

```
Q: exists (files of folder "c:")
A: True
```

This expression returns `True`, because files exist in drive `c:`. Note that using the plural property `files` is a safe way to refer to something that may or may not exist. For instance:

```
Q: file of folder "z:"
E: Singular expression refers to nonexistent object.
```

An error is generated here because there is no drive `z:` on the client computer. If you ask for a plural answer:

```
files of folder "z:"
```

It doesn't give you an answer, but it also doesn't cause an error. Nevertheless, both of these constructs can be examined with the `exists` keyword without causing an error:

```
Q: exists file of folders "z:"
```

```
A: False
```

```
Q: exists files of folders "z:"
```

```
A: False
```

You can use existence to determine if two directories have any files in common with an expression like this:

```
Q: exists file (names of files of folder "c:\") of folder "c:\old C"
```

```
A: True
```

This expression creates inspector objects for each file in the `c:\` folder. It then looks for a file of the same name in the folder `c:\old C`. It returns true if there are any files with the same name.

## If...Then...Else

If-then-else clauses have the form:

```
if <conditional-expression> then <expression1> else <expression2>
```

Both `<expression1>` and `<expression2>` must have the same type, and `<conditional-expression>` must be a singular Boolean.

If `<conditional-expression>` is true, then `<expression1>` is evaluated and returned; otherwise `<expression2>` is evaluated and returned.

If-then-else clauses have been implemented as late-binding, so potential missing inspectors on the branch not taken are ignored. This makes it safe to write cross-platform expressions

without worrying about causing errors for incorrect OS-specific Inspectors. For example, you can write:

```
Q: if name of operating system contains "Win" then name of application
   "conf.exe" of registry else "conf.exe"
A: conf.exe
```

On a non-Windows OS, this expression runs the `else` expression and avoid attempting to inspect a non-existent registry.

If-statements can be useful for reporting user-defined errors:

```
Q: if (year of current date as integer < 2006) then "Still good" else error
   "Expired"
E: User-defined error: Expired
```

This expression throws a user-defined error if the argument is false.

```
Q: if (name of operating system = "WinXP") then "wired" else if (name of
   operating system ="WinNT") then "tired" else "expired"
A: wired
```

This expression does a three-way test of the operating system.

Watch the video about the [If-Then-Else in Relevance Language](#) to have more information about this clause.

## It

There are two contexts in which `it` has a meaning:

1. <expression> whose (it)
2. (it) of <expression>

An example of the second context is this expression, which lists the names and file sizes of a specified folder:

```
Q: (name of it, size of it) of files of folder "c:"
```



```
A: AUTOEXEC.BAT, 0
A: blacklist.txt, 42
A: boot.ini, 209
A: CONFIG.SYS, 0
A: whitelist.txt, 213
```

Here, it refers to files of folder "c:".

The `whose` clause lets you filter a list based on the evaluation of an `it` expression. This is one of the most important targets of the `it` keyword:

```
Q: exist files whose (name of it starts with "b") of folder "c:"
A: True
Q: number of (files whose (name of it starts with "b") of folder "c:")
A: 2
```

In these expressions, it still refers to files of folder "c:".

You must be careful about the placement of parentheses, which can change the target of the `it` keyword. In the following expression, it refers to files:

```
Q: (files of folder "c:") whose (name of it contains "a")
A: "atl70.dll" "7.0.9466.0" "ATL Module for Windows (Unicode)"
   "7.00.9466.0" "Microsoft Corporation"
A: "blacklist.txt" "" "" "" ""
```

Note that this is not the same as the following expressions, which both have the wrong placement of parentheses:

```
Q: files of folder "c:" whose (name of it contains "a")
E: Singular expression refers to nonexistent object.
Q: files of (folder "c:" whose (name of it contains "a"))
E: Singular expression refers to nonexistent object.
```

These are two equivalent (and wrong) statements where the `it` refers to the closest object, which is the folder, not the files.

There can be more than one `it` in an expression. The rule is that each one refers to the object listed to the left of the associated `whose`. For example:

```
Q: preceding texts whose (it contains "n") of characters whose (it is "a")
  of "banana"
A: ban
A: banan
```

Here the expression returns the substrings preceding 'a' that contain 'n'. The first `it` refers to the substrings; the second refers to the characters. This simple and intuitive rule makes it easy to develop complex expressions. Here is another example:

```
Q: (characters of "banana") whose (exists character whose (it is "n") of
  preceding text of it)
A: a
A: n
A: a
```

This expression illustrates two nested `whose-it` clauses. The inner one finds leading substrings that contain an 'n'. The outer one returns the characters following those substrings. Because `it` represents a value, you can operate on it like any other variable:

```
Q: (it * it) of (1;2;3;4)
A: 1
A: 4
A: 9
A: 16
```

You can nest these references:

```
Q: (it * it) whose (it > 8) of (1;2;3;4)
A: 9
A: 16
```

Here, the first instances of `it` are multiplied and passed on to the third instance of `it` for comparison.

The `it` keyword never stands for an expression, but rather for a single value. Often it stands, in turn, for the serial values of a plural expression. But it can only stand for one value at a time.

Watch the video about the [It-without-Whose construct](#) to have more information about this clause.

## Sets

You can convert a list returned by a plural Inspector into a mathematical set. As such, you can perform typical set operations such as union and intersection.

You can create sets from individual elements, separated by semicolons `:`.

Sets cannot be directly represented in the debugger. To see the individual items in the list, use the `elements` command:

```
Q: elements of intersection of (set of ("to";"be"); set of
  ("or";"not";"to";"be"))
A: be
A: to
```

Sets also allow subtraction. For example, the following query returns the set composed of the elements 2, 3, and 4. Note that subtracting a number not in the original set doesn't affect the result. You can convert the set back to a printable list, using the `elements` command.

```
Q: elements of (set of (1;2;3;4) - set of (1;5))
A: 2
A: 3
A: 4
```

The `elements` keyword iterates over the set object, returning the individual set `elements` as an ordinary list.

## Indexing

You can index into lists of objects to select the desired property.

This query returns the second line of the specified text file:

```
Q: line 2 of file "c:/frost_poem.txt"
A: his house is in the village, though.
```

while this other query returns the name of the ninth month:

```
Q: month 9
A: September
```

## ANDs and ORs

Logical **AND** and **OR** are also available as binary operators. The following query returns **TRUE** only if both equations are true (**AND** expression):

```
Q: version of regapp "wordpad.exe" as string = "5.1.2600.2180" and name of
  operating system = "WinXP"
A: True
```

This query, instead, returns **TRUE** if one **OR** the other equation is true.

```
Q: name of operating system = "WinNT" or name of operating system = "WinXP"
A: True
```

You can also logically negate a Boolean expression with the 'not' keyword. This query returns **TRUE** if the "z:" drive doesn't exist.

```
Q: not exists drive "z:"
A: True
```

This is a unary operation (**not**) being used to negate another unary operator (**exists**).

Using existence with Boolean logic even lets you check for things that might otherwise return an error, for example:

```
Q: Exists folder "C:\doesn't exist" AND Exists files "this should normally
  break" of folder "c:\doesn't exist"
A: False
```

## Plurals

As you saw in the preceding section, plurals of inspectors are easy to create, typically by adding an 's' to the end of the name. For example, `substring` is singular, `substrings` is plural:

```
Q: substrings separated by " " of "a short string"
A: a
A: short
A: string
```

But a plural inspector does not have to return multiple values:

```
Q: substrings separated by " " whose (it contains "o") of "a short string"
A: short
```

Although the result is a plural substring type, there is only a single value. As you saw in the last section, a plural expression can return no value at all, without incurring an error.

```
substrings separated by " " whose (it contains "z") of "a short string"
```

This returns no values, but no error either. So it's important to remember that plurality is a property of the expression itself, not necessarily the results.

Furthermore, there are restraints on singular expressions. Whereas a plural can return zero, one or more values, a singular expression is expected to return a single value. For example:

```
Q: substring separated by " " whose (it contains "o") of "a short string"
A: short
```

You should be expecting a solitary value like this as a result of inspector. However, the following returns an error:

```
Q: substring separated by " " whose (it contains "s") of "a short string"
E: Singular expression refers to non-unique object.
```

This is because there are two words containing 's', and this expression is looking for a singular value. While two is too much, zero is not enough:

```
Q: substring separated by " " whose (it contains "z") of "a short string"
E: Singular expression refers to nonexistent object.
```

If you are certain of retrieving a solitary value, use the singular version. Otherwise, for greater flexibility, use the plural. As a practical example, you can find a single folder like this:

```
Q: name of folder of folder "c:\Documents and Settings"
A: All Users
E: Singular expression refers to non-unique object.
```

But as you can see, even though it returns an answer, it also generates an error. This is because there are multiple folders in the specified location, and this command only retrieves the first one. To see the complete list, you must use the plural version:

```
Q: names of folders of folder "C:\Documents and Settings"
A: All Users
A: Default User
A: LocalService
A: NetworkService
```

You can explicitly create plurals using a semicolon ; to separate the items. These are called "collections".

```
Q: "two"; "words"
A: two
A: words
Q: exist files ("c:\whitelist.txt"; "c:\blacklist.txt")
A: True
```

Notice that plurals must be the same type, or you will generate an error:

```
Q: "one", 1
E: Incompatible types.
```

## Tuples

Tuples add some useful properties to the language. A tuple is a compound type composed of two or more other types. It can be returned directly from an inspector, like this:

```
: (now & (1 * hour)) * true
A: ( Fri, 22 Sep 2006 15:25:43 -0400 to Fri, 22 Sep 2006 16:25:43 -0400 ),
    True
```

This expression returns a compound object including a time range and an associated Boolean `True/False`. Note the use of the concatenation operator `&`, used here to create a time range.

Tuples can also be explicitly generated using the comma `,` keyword. Any mix of types is allowed:

```
Q: number of processors, "B or not", 8/4, character 66
A: 2, B or not, 2, B
Q: now, "is the time"
A: ( Fri, 22 Sep 2006 12:14:55 -0400 ), is the time
Q: 1, number of processors < 3, "friend"
A: 1, True, friend
```

Note that if an individual inspector returns a tuple, it will always return the same types in the same order. It's not possible to have an inspector return tuples of type `<integer, string>` in one case and `<string, integer>` in another.

Tuples can also be indexed by using the `item` keyword (indices start at 0). For example:

```
Q: item 0 of ("foo", 3, free space of drive of system folder)
A: foo
Q: (item 1 of it; item 2 of it) of ("foo", 3, free space of drive of system
    folder)
A: 3
A: 18105667584
```

Tuples provide a way for a relevance expression to return several related properties. For example, you could generate a set of file names and corresponding file sizes for all files that meet a specific criteria with a Relevance statement like this:

```
Q: (name of it, size of it) of files whose (size of it > 100000) of folder
   "C:"
A: hiberfil.sys, 536301568
A: ntldr, 250032
A: pagefile.sys, 805306368
```

Tuples can be combined with plurals to create expressions of surprising complexity and power. The easiest combination is also the least useful. Forming plurals of tuples (of the same type) just creates a plural tuple:

```
Q: (1,2); (3,4)
A: 1, 2
A: 3, 4
```

However, attempting to form a plural of tuples of different types causes an error. As you have already seen, plurals must always be of the same type:

```
Q: (1,2); ("a", "b")
E: Incompatible types.
```

Interestingly, forming a tuple of plural expressions generates a set of tuples that represents the cross product of all the component plurals:

```
Q: ((1; 2), ("a"; "b"), ("*"; "$"))
A: 1, a, *
A: 1, a, $
A: 1, b, *
A: 1, b, $
A: 2, a, *
A: 2, a, $
A: 2, b, *
A: 2, b, $
```



Tuples of plurals can also be used to search two lists for commonality. For example, suppose you have two lists of integers, and want to know what numbers are in the intersection of the lists. You can do this by using a nested `whose`, and then you refer to the outer list by wrapping it in a tuple:

```
Q: (1;2;3;4) whose (exists (it, (2;4;6;8)) whose (item 0 of it is item 1 of
  it))
A: 2
A: 4
```

The downside of this method is that the second list is bound within the `whose` clause and must be re-created for every iteration. To maintain responsiveness, you should keep lists like this short. Tuples of plurals can also be used to compare two sets of data:

```
Q: ((1;2;3;4),(5;6;7;8)) whose (item 1 of it = 2*item 0 of it)
A: 3, 6
A: 4, 8
```

You can also find out just which files are in common by serially comparing the tuples of 'new folder, old folder':

```
Q: (names of files of folder "c:\") whose (exists (it, (names of files of
  folder "c:\old C")) whose (item 0 of it is item 1 of it))
A: CONFIG.SYS
A: IO.SYS
A: MSDOS.SYS
A: report.txt
```

## Whose...It

The `whose` clause allows you to filter a result or set of results based on specified relevance criteria. It has the form:

```
<expression> whose <condition>
```

For example:

```
Q: (1;2;3;5;8;17) whose (it mod 2 = 1)
A: 1
A: 3
A: 5
A: 17
```

The special keyword `it` refers to the elements of the list – in this case the collection of numbers – and is bound only within the filter expression. The filter expression is executed once for every value in the filtered property, with `it` referring to each result in turn. The results where the filter clause evaluates to `True` are included in the output list. Note that `it` always refers to the list immediately to the left of the `whose` statement.

The `it` keyword can also refer to objects that are not part of a `whose` clause:

```
Q: (it * 2) of (1;2;3)
A: 2
A: 4
A: 6
```

Here, `it` takes on the values in the list, one at a time.

You can also use parentheses to define the scope of the `whose-it` objects. A judicious use of parentheses can ensure proper results while improving readability. For example, the following examples show how subtle rearrangement of `whose` clauses can change the output significantly:

```
Q: preceding texts of characters of "banana" whose (it contains "n")
A:
A: b
A: ba
A: ban
A: bana
A: banan
Q: preceding texts of characters of ("banana" whose (it contains "n"))
A:
```

```
A: b
A: ba
A: ban
A: bana
A: banan
```

These expressions both go character-by-character through the word 'banana' and return the text preceding each character. Because it returns the text before the character, it returns the blank before 'b' and stops at the final 'a' with 'banan'. The expressions both return the same values, but the second one makes it more clear what `it` refers to, namely 'banana'. Since 'banana' always has an 'n', this expression returns all the specified substrings.

```
Q: preceding texts of characters whose (it contains "n") of "banana"
A: ba
A: bana
Q: preceding texts of (characters of "banana") whose (it contains "n")
A: ba
A: bana
```

These two expressions are equivalent, but the second one shows more explicitly what `it` refers to, namely the characters of the word `banana`. The 'n' appears twice in `banana`, and so two substrings are returned.

```
Q: preceding texts whose (it contains "n") of characters of "banana"
A: ban
A: bana
A: banan
Q: (preceding texts of characters of "banana") whose (it contains "n")
A: ban
A: bana
A: banan
```

These two expressions do the same thing, but the second one makes it obvious that `it` refers to the text preceding the character. Thus only the initial substrings of 'banana' that contain an 'n' are returned.

In practical usage, you could use `whose` clauses to filter folders:

```
Q: names whose (it contains "a") of files of folder "c:"
A: atl70.dll
A: blacklist.txt
A: pagefile.sys...
```

Or you can put the `whose` clause at the end of the expression, which makes the object of `it` more explicit and might be easier to read:

```
Q: (names of files of folder "c:") whose (it contains "a")
A: atl70.dll
A: blacklist.txt
A: pagefile.sys
```

If the filtered property is singular, the result of the `whose` clause is singular. If the filtered property is a plural type, the result is a plural type.

```
Q: exists active device whose (class of it = "Display")
A: True
```

This singular property evaluates to true if there is an active display device on the client computer.

```
Q: files whose (name of it starts with "x") of system folder
A: "xactsrv.dll" "5.1.2600.2180" "Downlevel API Server DLL" "5.1.2600.2180
(xpsp_sp2_rtm.040803-2158)"
"Microsoft Corporation"
A: "xcopy.exe" "5.1.2600.2180" "Extended Copy Utility" "5.1.2600.2180
(xpsp_sp2_rtm.040803-2158)"
"Microsoft Corporation"
```

This plural expression returns a list of system files whose names start with 'x'.

As it loops through the plural values, the expression in the filter might attempt to evaluate a non-existent object. By itself, such an expression would cause an error such as:

```
Singular expression refers to nonexistent object.
```

But in the case of a `whose` clause, the non-existent value is simply ignored and gets excluded from the resulting set. As a side effect, this feature allows you to examine an object for existence before you attempt to inspect it (and cause an error). As an example, here is a Relevance clause that triggers an existence error:

```
Q: exists file of folder "z:\bar"
E: Singular expression refers to nonexistent object.
```

But, by placing this clause inside a `whose` statement, you can avoid the error:

```
Q: exists true whose ( exists file of folder "z:\bar" )
A: False
```

Watch the video about the [Whose-It in Relevance Language](#) to have more information about this clause.

## Parent Types

Objects can have a parent object. The child object inherits the properties of its parent. This is very useful because it gives us access to a lot more inspectors. For example, the parent of file line is string. So we can make use of all the string inspectors with a file line object. In this example you use the substring separated by inspector of the string object on a file line object:

```
Q: substrings separated by "," of lines of file "c:\temp\file.txt"
A: Hello
A: world.
```

The inherited properties are not listed in the usual documentation nor are they returned by the properties of type introspector. These are the properties of the file line, as you can see there's no substrings separated by:

```
Q: properties of type "file line"
A: line number of <file line>: integer
A: previous line of <file line>: file line
```

```
A: next line of <file line>: file line
```

You can view the parent of an object using an introspector called `parent of type`:

```
Q: parent of type "file line"
A: string
```

You can see the inherited properties by introspecting the parent:

```
Q: properties of parent of type "file line"
A: concatenations <html> of <string>: html
A: html tag <string> of <string>: html
A: html of <string>: html
A: ...
```

Finally, you can use the `parent of type` introspector to find all the objects that have a parent:

```
Q: types whose (exists parent of it)
A: application
A: client
A: ..
```

## Client Relevance

Here you find the information about the Inspectors that you can use to get information from the Clients in your deployment.

You can create and test your custom queries locally on the Client system using the Fixlet Debugger or on the Linux CentOS interactive sandbox available under Online Evaluator.

If you own a BigFix Lifecycle or a BigFix Compliance version 9.5 Patch 2 or later license, you can exercise your Client Relevance Language queries on the target clients also directly from the WebUI using the BigFix Query Application. For more information, click [Get Started with BigFix Query](#).

## System Information

The system information inspectors are particularly useful for identifying attributes of the running operating system.

### Hardware

There is a large number of properties of the underlying hardware that you can query.

You can start with processor information:

```
Q: vendor names of processors
A: GenuineIntel
A: GenuineIntel
A: GenuineIntel
A: GenuineIntel
```

You see that the query returns several identical entries even on a single processor systems. That is because each CPU core is referenced as its own processor.

You can collapse these identical results into a single one using the `unique values` inspector, like this:

```
Q: unique values of vendor names of processors
A: GenuineIntel
```

Continuing, you can reference the speed of the processors:

```
Q: speeds of processors
A: 2600000000 hertz
A: 2600000000 hertz
A: 2600000000 hertz
A: 2600000000 hertz
```

And the name:

```
Q: family names of processors
A: Core i7-3720QM
A: Core i7-3720QM
```

```
A: Core i7-3720QM
```

```
A: Core i7-3720QM
```

## Operating System

You can pull the name of the operating system:

```
Q: name of operating system
```

```
A: Mac OS X
```

```
Q: name of operating system
```

```
A: Win2008R2
```

Or the version:

```
Q: (name of it, version of it) of operating system
```

```
A: Mac OS X, 10.9.5
```

```
Q: (name of it, version of it) of operating system
```

```
A: Win2008R2, 6.1.7601
```

You can also pull the architecture:

```
Q: (name of it, architecture of it) of operating system
```

```
A: Mac OS X, x86_64
```

```
Q: (name of it, architecture of it) of operating system
```

```
A: Win2008R2, 6.1.7601
```

There are simple ways to determine the OS of an endpoint without having to do string comparisons:

```
Q: windows of operating system
```

```
A: False
```

```
Q: unix of operating system
```

```
A: False
```

```
Q: mac of operating system
```

```
A: True
```

On Windows systems you can also query the service pack version:



```
Q: service pack major version of operating system
A: 1
```

Finally you can query up time:

```
Q: uptime of operating system
A: 28 days, 20:20:22.496818
```

## Drives

You can also query information related to mounted disk drives.

On a Mac systems:

```
Q: free space of volume "Macintosh HD"
A: 402534928384
```

On Windows systems:

```
Q: (free spaces of it, names of it) of drives
A: 53851201536, C:
```

## Folders and Files

Folders and files are two out of the most commonly used client inspectors. You can use them both as plurals.

### Folders

The `folder` object refers to a folder in the Windows operating system or to a directory in the UNIX and Linux operating systems.

You can query the parent folder of a specific file:

```
Q: parent folder of file "/etc/passwd"
A: /etc
```

or you can query the parent folder of a specific folder:

```
Q: parent folder of folder "C:\Program Files (x86)\BigFix Enterprise\BES
Client"
A: C:\Program Files (x86)\BigFix Enterprise
```

in both cases the resulting type is a folder type.

The following properties, instead, return a *string* type result:

```
Q: name of folder "/usr/bin"
A: bin
Q: pathname of folder "C:\Program Files (x86)\BigFix Enterprise\BES Client"
A: C:\Program Files (x86)\BigFix Enterprise\BES Client
```

On Windows systems you can use the predefined keywords **windows folder** and **system folder** that return a `folder` object corresponding to the windows or system folder. Because these folders are located in different locations for different operating systems, these commands are very useful.

## Files

You can identify a file to query either by specifying its name and the name of the folder that contains the file or by specifying the complete path to the file, as follows:

```
Q: exists file "passwd" of folder "/etc"
A: True
Q: exists file "c:\windows\notepad.exe"
A: True
```

Another way to identify files on a Windows computer, if they are the executable files of registered applications, is using the regapp inspector. For example, if you are looking for the path to the Firefox executable file, you can query:

```
Q: pathname of regapp "firefox.exe"
A: C:\Program Files (x86)\Mozilla Firefox\firefox.exe
```

These examples show the properties of the file object that you can query:

```
Q: exists file "mshtml.dll" of system folder
```

```

A: True
Q: name of file "mshtml.dll" of system folder
A: mshtml.dll
Q: name of parent folder of file "mshtml.dll" of system folder
A: System32
Q: pathname of file "mshtml.dll" of system folder
A: C:\windows\system32\mshtml.dll
Q: modification time of file "mshtml.dll" of system folder
A: Mon, 08 Feb 2016 23:05:38 +0200
Q: version of file "mshtml.dll" of system folder
A: 11.0.9600.18231
Q: size of file "mshtml.dll" of system folder
A: 20352512
Q: sha1 of file "mshtml.dll" of system folder
A: 3e32ddb41d96e72c041248ca8f69f98ba99a6f0
T: 264.912 ms

```

The `sha1` inspector stands for Secure Hash Algorithm, and it is a simple checksum that is used to verify the integrity of downloaded files. You will use it along with the `size` inspector to manage downloads in a Fixlet action.

You can also query the content of the lines included in a specific file as follows:

```

Q: line 1 of file "/tmp/myfile.txt"
A: Hello!

```

## Registry

On Windows systems you can use the `registry` inspector to retrieve information about registry keys. For example, you can:

- Test for the existence of a specific key:

```

Q: exists key "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\BigFix
\EnterpriseClient" of registry

```

```
A: True
```

- Test the existence of a key with a value assigned:

```
Q: exists value whose (name of it is "Version") of key
   "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\
   BigFix\EnterpriseClient" of registry
A: True
T: 0.139 ms
```

- Retrieve the value of a specific key:

```
Q: value "Version" of key "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node
   \BigFix\EnterpriseClient"
   of registry
A: 9.2.6.94
T: 0.092 ms
```

- Iterate through the names and values of keys in the registry:

```
Q: (names of it, it) of values of key "HKEY_LOCAL_MACHINE\SOFTWARE
   \Wow6432Node\BigFix\
   EnterpriseClient" of registry
A: Version, 9.2.6.94
A: EnterpriseClientFolder, C:\Program Files (x86)\BigFix Enterprise\BES
   Client\
T: 41.472 ms
```

- Discover the last time a given registry key was written:

```
Q: last write time of key "HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node
   \BigFix\EnterpriseClient" of registry
A: Fri, 26 Feb 2016 16:35:15 +0200
T: 35.340 ms
```

When examining registry keys ensure that you:

- Include the word `key` in the expression.
- Surround by double quotes (") key values and key names.
- Write `of registry` after the key name.

**Tip:** Values from the registry are pre-defined as registry objects. This means that, even if they look like a string, folder, or time, you must cast the value into the type you want by using the commands `as string`, `as folder`, or `as time`. For example, if you want to know the first three characters of the value returned by this query:

```
Q: value "BDEInstallFolder" of key "HKLM\Software\BigFix\BDE" of registry
A: C:\Program Files\BigFix Development\BDE\
T: 35.340 ms
```

you must specify `as string` as follows:

```
Q: first 3 of (value "BDEInstallFolder" of key "HKLM\Software\BigFix\BDE"
of registry as string)
A: C:\
T: 10.340 ms
```

You can use the following shortcuts for registry keys:

**HKCR** HKEY\_CLASSES\_ROOT

**HKCU** HKEY\_CURRENT\_USER

**HKLM** HKEY\_LOCAL\_MACHINE

**HKU** HKEY\_USERS

**HKCC** HKEY\_CURRENT\_CONFIG

You can use predefined commands to query at run time the list of registered applications (`regapps`), the list of applications currently running (`running applications`) and the list of most recently accessed applications (`recent applications`).

**Note:** If you are using the QnA tool to test your relevance queries, you might need to close and re-open the program to get an updated list of running applications.

On target systems, BigFix runs as LOCAL SYSTEM. To get the logged in user's HKEY\_CURRENT\_USER value, you can search through the Logon keys for the name of the current user:

```
Q: name of key whose ((it = name of current user as lowercase OR it starts
with name of current user
as lowercase & "@") of (it as string as lowercase) of value "Logon User
Name" of key "Software\Microsoft\Windows\
CurrentVersion\Explorer" of it) of key "HKEY_USERS" of registry A:
S-1-5-21-1214450339-2025729265-839522115-1013
```

## Network

### Addressing

You can easily get the IP Addresses assigned to adapters on the system

```
Q: addresses whose (it as string != "0.0.0.0") of ip interfaces whose
(loopback of it = false) of network as string
A: 192.168.1.102
A: 9.80.109.49
```

You can also get Mac Addresses of network adapters:

```
Q: (mac addresses of it, addresses of it) of ip interfaces of network as
string
A: 3c-15-c2-b7-c7-1a, 192.168.1.102
```

And you can get the names of the network adapters:

```
Q: names of adapters of network
A: bridge0
A: en0
A: en1
A: en2
A: fw0
```

```
A: gif0
A: lo0
A: p2p0
A: stf0
A: vmnet1
A: vmnet8
```

Or the names of the active network adapters:

```
Q: friendly names of adapters whose (up of it = true) of network
A: bridge0
A: en0
A: en1
A: en2
A: lo0
A: p2p0
A: vmnet1
A: vmnet8
```

Finally, you can get the names and IP addresses of the adapters that are online:

```
Q: addresses of ipv4 interfaces whose (exists address of it) of adapters
   whose
   (up of it = true) of network
A: 192.168.44.92
A: 127.0.0.1
A: 192.168.235.1
A: 192.168.181.1
```

Some adapters don't have associated ipv4 interfaces so you must check to make sure that they exist using a whose-it statement.

Finally, you can get the names and addresses of all adapters:

```
Q: (name of adapter of it, addresses of it) of ipv4 interfaces of adapters
   whose (up of it = true) of network
```

```
A: en1, 192.168.44.92
A: lo0, 127.0.0.1
A: vmnet1, 192.168.235.1
A: vmnet8, 192.168.181.1
```

You can also get the cidr strings of your connected networks:

```
Q: (name of adapter of it, cidr string of it) of ipv4 interfaces of
  adapters whose (up of it = true) of network
A: en1, 192.168.44.0/24
A: lo0, 127.0.0.0/8
A: vmnet1, 192.168.235.0/24
```

This is particularly useful for checking if an endpoint is on a certain network (Note one of the interfaces is on the 192.168.44.0/24 subnet):

```
Q: exists (ipv4 interfaces of adapters whose (up of it = true) of network)
  whose (cidr string of it = "192.168.44.0/24")
A: True
```

## Applications

There are a number of inspectors that are particularly useful for inspecting installed applications on the system.

The first inspector is the Registered Applications inspector, which is called by using "regapps". This inspector returns the list of applications installed on the system.

On Windows systems:

```
Q: names of regapps
A: 7zFM.exe
A: AcroRd32.exe
A: BESConsole.exe
A: chrome.exe
A: dexplore.exe
```



```
A: firefox.exe
A: iediagcmd.exe
A: iediagcmd.exe
A: iexplore.exe
A: javaws.exe
A: notepad++.exe
A: vsta.exe
A: WinMergeU.exe
A: WinMergeU.exe
A: WinRAR.exe
```

### On Mac OS systems:

```
Q: names of regapps
A: Dota 2.app
A: GitHub.app
A: Google Chrome.app
A: Adium.app
A: Adobe Reader.app
A: App Store.app
A: AT&T Global Network Client Uninstaller.app
A: AT&T Global Network Client.app
A: Automator.app
A: Balsamiq Mockups.app
A: Calculator.app
```

You can also get the version:

### Windows systems:

```
Q: (names of it, versions of it) of regapps
A: 7zFM.exe, 9.20.0.0
A: AcroRd32.exe, 11.0.9.29
A: BESConsole.exe, 9.1.909.0
A: chrome.exe, 54.0.151.5
```

```
A: dexplore.exe, 8.0.50727.1826
A: firefox.exe, 33.0.2.5413
A: iediagcmd.exe, 11.0.9600.16428
A: iediagcmd.exe, 11.0.9600.16428
A: iexplore.exe, 11.0.9600.17344
A: javaws.exe, 10.67.2.1
A: notepad++.exe, 6.5.1.0
A: vsta.exe, 9.0.30729.1
A: WinMergeU.exe, 2.12.4.0
A: WinMergeU.exe, 2.12.4.0
A: WinRAR.exe, 5.1.0.0
```

### Mac OS systems:

```
Q: (names of it, versions of it) of regapps
A: Dota 2.app, 1.0
A: GitHub.app, Medium Hefson
A: Adium.app, 1.5.10
A: Adobe Reader.app, 11.0.9
A: App Store.app, 1.3
A: AT&T Global Network Client Uninstaller.app, 1.0
A: AT&T Global Network Client.app, 1.5.0.3024
A: Automator.app, 2.4
A: Balsamiq Mockups.app, 2.2.22
A: Calculator.app, 10.8
A: Google Chrome.app, 54.0.151.5
```

From the examples above, you know that on Windows systems the executable is called, "chrome.exe" and on Mac OS the executable is called (Case-sensitive!), "Google Chrome.app". Knowing this, you can check to see if a specific application is installed:

### Windows systems:

```
Q: exists regapp "chrome.exe"
A: True
```

Mac OS systems:

```
Q: exists regapp "Google Chrome.app"
A: True
```

If you want to deploy Google Chrome you could use the following query:

Windows systems:

```
Q: not exists regapp "chrome.exe"
A: True
```

Mac OS systems:

```
Q: not exists regapp "Google Chrome.app"
A: True
```

The query returns true if Chrome is not installed on the computer.

## Comparing Versions

Versions are not numbers in the traditional sense, they are made of multiple segments separated by periods, such as "6.01.2.3". A common (but not universal) structure numbers the releases like this: `major.minor[.revision[.build]]`

So, when you compare versions, you must specify all the relevant segments to get a proper comparison. If you compare them as if they were integers or floating point numbers, you might get the wrong answer.

The Relevance language compares the numeric values of the version segments (separated by periods), regardless of the number of digits in the segment, so ensure that you write the complete version numbers.

If the latest version of Chrome is "55.0.5.14", you can test if your endpoint is running the latest version.

Windows systems:

```
Q: exists regapp "chrome.exe" whose (version of it < "55.0.5.14" as
version)
```

```
A: True
```

### Mac OS systems:

```
Q: exists regapp "Google Chrome.app" whose (version of it < "55.0.5.14" as
  version)
```

```
A: True
```

These statements return true only if Chrome exists and the version is less than "55.0.5.14". This is perfect if you want to patch Google Chrome but you do not want to install the patch if Chrome is not installed on the system.

These are additional examples of versions comparisons:

```
Q: "5.00" as version = "5.50" as version
```

```
A: False
```

```
A: True
```

```
A: True
```

```
A: False
```

## Services

The service inspector allows you to query installed services on a computer. You can query installed services using the **service** inspector, or you can query the installed services that are currently running using the inspector **running service**.

If the BESClient service is installed but not active at the time you run the inspector you will get:

```
Q: exists service "BesClient"
```

```
A: True
```

```
Q: exists running service "BesClient"
```

```
A: False
```

You can use the plural **services** to get the list of services, each with its service name, display name, and status.

```

Q: services
A: "AdobeARMservice" "Adobe Acrobat Update Service" "Running"
A: "AdobeFlashPlayerUpdateSvc" "Adobe Flash Player Update Service"
  "Stopped"
A: "AeLookupSvc" "Application Experience" "Stopped"
A: "ALG" "Application Layer Gateway Service" "Stopped"

```

or to get specific values for all services, such as the display name, the login account under which the service is configured to run, the status and the 'imagepath':

```

Q: (display name of it, login account of it, state of it, image paths of
  it)
  of services
A: Adobe Acrobat Update Service, LocalSystem, Running, "C:\Program Files
  (x86)\Common Files\
  Adobe\ARM\1.0\armsvc.exe"
A: Adobe Flash Player Update Service, LocalSystem, Stopped, C:\windows
  \SysWOW64\Macromed\Flash\
  FlashPlayerUpdateService.exe
A: Application Experience, localSystem, Running, C:\windows
  \system32\svchost.exe -k netsvcs

```

## Users

Use these Inspectors to return information about local and current user accounts, including names, logins, and passwords and whether they are logged in or not.

In BigFix version 9.5, these are the currently available Inspectors for users:

- active directory local user to query Active Directory local users. They include the distinguished name and groups.
- user to list properties of all users, whether they are logged in or not.

- logged on user to list information about the currently logged-on user on that specific Windows or Macintosh system. With the advent of Terminal Services and Fast User Switching, these inspectors are designed to iterate over all logged on users.

Use the Introspectors to see all the properties of these objects that you can query, for example:

```
Q: properties of type "user"
A: logged on user of <user>: logged on user
A: sid of <user>: security identifier
A: name of <user>: string
A: active directory user of <user>: active directory local user
A: password age of <user>: time interval
A: guest privilege of <user>: boolean
A: user privilege of <user>: boolean
A: admin privilege of <user>: boolean
A: home directory of <user>: string
A: home directory folder of <user>: folder
A: ....
```

or to filter for specific properties satisfying a criterion, for example:

```
Q: properties whose (it as string contains "password") of type "user"
A: password age of <user>: time interval
A: no password required flag of <user>: boolean
A: password change disabled flag of <user>: boolean
A: password expiration disabled flag of <user>: boolean
A: bad password count of <user>: integer
A: password expired of <user>: boolean
```

## Event Log

The `event log` Inspectors return information about the specified Windows Event logs.

You can query the System event log that records OS or component events, such as the failure of a bootup service.

You can query the Application event log. For example:

```
Q: description of record (oldest record number of it) of application event
log
```

returns the description of the oldest record in the application event log.

You can query the event log of an application, for example:

```
Q: exists event log "Application"
```

returns TRUE if that application log exists.

You can query the security event log, which records global or local group policy events.

## WMI

It's easy and fast to find the names of the drives connected to the local computer:

```
Q: names of drives
A: A:
A: C:
A: D:
A: E:
A: F:
A: G:
```

But how do you find out about mapped drives?

```
Q: (selects ("ProviderName from win32_LogicalDisk")of WMI)
A: ProviderName
A: ProviderName
A: ProviderName
A: ProviderName
A: ProviderName
```

```
A: ProviderName=\Plato\shared docs
```

The WMI Inspector used in the example above shows that the last drive is mapped to a shared docs folder. You can correlate the drive names to the shared names as well:

```
Q: (if property "ProviderName" of it as string contains "=" then
(substring after "=" of (property "Name" of it as string) & " -- " &
substring after
"=" of (property "ProviderName" of it as string)) else nothing) of select
objects
("Name,ProviderName from win32_LogicalDisk")of WMI
A: G: -- \Plato\shared docs
```

This expression finds all the mapped drives, and returns their names and their mapping.

**Note:** If you run the WMI query on a system with a local user, ZERO RESULTS is returned.

This might be because either there are no results or because there is a lack of user context.

## Session Relevance

In this section you find the information about the Inspectors that you can use to extract data stored in the BigFix database. This information can be used together with the APIs to customize reports and dashboards or to interact with external applications.

### Basic concepts

The Session Inspectors allow you to collect information from the BigFix database and use it to develop interactive displays, Dashboards, Wizards, and powerful custom reports.

The Session Inspectors can be run mainly in two environments: the Console and the Web Reports. Use the following global Boolean properties to know whether your Relevance expressions are being evaluated in the Console or Web Reports:

```
in console context
in Web Reports context
```



These Inspectors will return `TRUE` or `FALSE`, depending on which environment is currently active.

There are three main categories of Session Inspectors:

- **Data-store Inspectors**, which process items in the database. They start with key *bes*.
- **Set Inspectors**, that allow you to treat lists of objects as mathematical sets.
- **HTML Inspectors**, that help you to format your presentations using hypertext markup.

You can get the list of available Data-Store Inspectors by running the following command in the Presentation Debugger tool:

```
properties whose (direct object type of it as string starts with "bes")
```

The basic types include `bes fixlet`, `bes action`, `bes property` and `bes computer`.

The Set Inspectors treat a list of objects as a mathematical set. These sets, in turn, can be manipulated with traditional set operators like union and intersection.

You can create sets from individual elements, separated by semicolons:

```
elements of intersection of (set of ("to";"be"); set of  
("or";"not";"to";"be"))
```

which returns the list: `be,to`.

Or you can create sets from ordinary lists, for example:

```
intersection of administered computer sets of bes users whose  
(name of it is "joe" or name of it is "sue")
```

which returns the set of computers administered by both Sue and Joe.

HTML Inspectors help you to author HTML commands to create customized content for the BigFix Console and Web Reports. They allow construction of HTML snippets that can be used to display BigFix data elements in a browser.

When generating HTML, you will be working with the `html` type. This type can be thought of as a string that carries around an indication that its content is to be treated as HTML. This automatically keeps track of normal string characters that have special meaning in HTML (such as `<`, `>`, and `&`), and escapes them.

An HTML inspector automatically converts:

- The reserved characters to the appropriate HTML entities.
- The results of evaluated relevance instructions to HTML before inserting them into the presentation HTML. This means that you can write Relevance expressions just as you would expect and simply use the html Inspector to convert them, for example:

```
html of "AT&T"
```

returns: <html>AT&amp;T</html>.

Or you can cast a string as an html type explicitly to achieve the same results (but without the bracketing <html> tags), for example:

```
"<h1>Heading</h1>" as html
```

returns: &lt;h1&gt;Heading&lt;/h1&gt;

If you actually want HTML code to be output, you can use an indexed HTML command such as:

```
html "<h1>Heading</h1>"
```

As an alternative to HTML-formatted retrieved properties, consider reporting the results in plain text and doing the formatting from within the presentation.

## Linking to other documents

You can use the link property of <bes fixlet>, <bes computer>, <bes action> and <bes user> to create a hyperlink that opens the document window for that object when it is clicked.

In the Console, clicking the link will open the MDI document for the given object. In Web Reports, the link opens a Web Reports page for the object.

There are a few different forms of the link Inspector:

```
link of bes fixlet whose (id of it is 1)
```

returns an anchor tag of the form:

```
<A href="linkid:openfixlet(2,1)">BigFix Clients in Seat Count Grace Mode</A>
```

This HTML syntax creates a hyperlink labeled "BigFix Clients in Seat Count Grace Mode", which represents the title of the Fixlet message, that, when clicked, brings up the Fixlet with ID=1 in the Console.

These are other examples:

```
link "Click Here" of bes fixlet whose (id of it is 1)
```

returns

```
<A href="linkid:openfixlet(2,1)">Click Here</A>
```

```
link (b of "Click Here") of bes fixlet whose (id of it is 1)
```

returns

```
<A href="linkid:openfixlet(2,1)"><b>Click Here</b></A>
```

which creates the link in bold.

Web Reports does not use the linkid: protocol, but instead interprets the code to generate its own-style links. Therefore, for portability reasons, use the link Inspector to automatically generate the proper link styles whenever possible.

## Adding Relevance to Presentations

You can evaluate relevance in presentations in two ways, which are compatible with both the Console and Web Reports. The two ways are **server side** and **client side**.

### Server side preprocessing

Preprocessor directives are typically handled by the server before the page is loaded and handed to the display engine. This is the syntax that is used:

```
<?relevance "expression"?>
```

which is similar to other language declarations, such as `<?xml?>` or `<?php?>` tags.

This is useful for expressions that only need to be evaluated once, or for those you need as soon as the page is loaded.

In Web Reports, you might choose this technique if you want to apply an active filter. The result is coerced into the new HTML Inspector type, which means that string results will be escaped so that they will not confound any surrounding HTML code.

### **Client side processing using JavaScript**

This technique uses the EvaluateRelevance API, which allows you to incorporate Relevance results within JavaScripts. This functionality is provided by an external javascript file that is automatically included by console documents that support presentation functionality (including Fixlets, Tasks, Baselines, Analyses, and Wizard documents).

In Web Reports, the included file is defined slightly differently, but provides the same functionality. From any script code you can evaluate a Relevance expression and get the results back as a string, like this:

```
myDiv.innerText = EvaluateRelevance( "expression" );
```

Where "expression" is a Relevance expression, as discussed above.

The result of EvaluateRelevance depends on whether the expression is a singular expression or a plural expression. If the expression is singular, the result is a string. If it is plural, the result is an array of strings. Unlike the results of relevance in processing instructions, none of the strings are HTML-escaped unless you use the "as html" cast explicitly. There are many advantages to working with JavaScript. One of the most important is user interactivity. For example, you can create a script that will only evaluate relevance after getting input from the Console user.

### **Refreshing Relevance**

In general, users of the Console expect the documents to be updated as new information comes in from the database. To make `<?relevance?>` instructions automatically update, you must specify another pair of processing instructions to enclose the desired section of the document:

```
<?BeginRefreshRelevance?>
```

```

...
...
..
<?EndRefreshRelevance?>

```

These tags will cause every `<?relevance?>` tag contained between them to be re-evaluated every time something in the Database changes.

**Note:** Web Reports does not support refreshing relevance.

The actual implementation of this update is important because it can affect how you code your HTML. The `<?BeginRefreshRelevance?>` tag is replaced by a `<span>` tag, and the `<?EndRefreshRelevance?>` tag is replaced by a `</span>` tag.

To correctly identify which `<span>` must be updated, the console assigns an ID attribute to the `<span>` tag that it generates to replace the `<?BeginRefreshRelevance?>` tag. By default, that ID is `"__DRRSN"` (an acronym for Default Refresh Relevance Section Name). You can specify a different ID in the refresh tags like this:

```

<?BeginRefreshRelevance id="MyRefreshSpan"?>
...
..
<?EndRefreshRelevance id="MyRefreshSpan"?>

```

Note that the IDs must match. You can nest RefreshRelevance tags arbitrarily because they will be matched up using their IDs. You cannot specify more than one RefreshRelevance section without using an ID attribute.

You can specify what types of changes will trigger a refresh, and how often, by adding attributes to the BeginRefreshRelevance tag, for example:

```

<?BeginRefreshRelevance id="OpenActions" ActionResults="00:01:00"
  Actions="00:00:00" ?>
<?relevance (link of it & " (" & (number of results of it as string) & ")"
  & br) of bes actions
whose (state of it is "Open") ?> <?EndRefreshRelevance id="OpenActions" ?>

```

The first line has an attribute called `ActionResults`, which determines the refresh rate. Here it is set to `00:01:00` to refresh no more than once per minute (using the standard BigFix `TimeInterval` string format). When an action result changes, the Console will only refresh the section if at least one minute has passed since the last action result change was detected.

Other refresh attributes include:

- **Computers:** Refresh whenever a computer is added or removed (`ComputerDataStore`).
- **ReportTimes:** Refresh whenever a computer's last report time changes.
- **ExternalContent:** Refresh whenever external Fixlet site content changes (`FixletStore`).
- **CustomContent:** Refresh whenever custom content changes, not including actions (`ActionSiteStore`).
- **Actions:** Refresh whenever actions are taken, stopped, restarted, and so on. (`ActionStore`).
- **ActionResults:** Refresh whenever a client reports on the status of an action (`ActionResultStore`).
- **FixletResults:** Refresh whenever a client reports on the relevance of a Fixlet (`FixletResultStore`).
- **PropertyResults:** Refresh whenever a client reports a new value for a retrieved property (`RPRestultStore`).
- **RefreshCycle:** Force a refresh at the end of the refresh cycle, regardless of whether anything has changed.
- **ManualRefresh:** Define blocks that can be refreshed manually by using the `ManualRefresh` attribute in combination with the predefined `ManualRefresh` script function.

This is an example of **ManualRefresh**:

```
<?BeginRefreshRelevance ManualRefresh="00:00:00"?>
<?relevance now ?>
<?EndRefreshRelevance?>
<?BeginRefreshRelevance id="Foo" ManualRefresh="00:00:00"?>
<?relevance now ?>
```

```
<?EndRefreshRelevance id="Foo"?>
```

**Note:** You must pass the ID of "Clock" to the ManualRefresh function, or you will refresh the wrong section.

## BES Action

Each action might have several properties that can be examined using these Inspectors. You can iterate over the actions to create lists.

### Examples

```
names of hidden bes actions
```

Returns the list of currently hidden BES Actions.

```
links (h1 of name of it) of bes actions
```

Creates clickable links listing all the current BES Actions, displaying the Action names in headline format.

```
links (name of it & "(" & id of it as string & ")") of bes actions
```

Creates clickable links listing all the current BES Actions, formatted as name and ID.

```
(br & html "Click <A href='" & link href of it & html "'>here</A> to open  
action "  
& id of it as string) of bes actions
```

Creates clickable links listing all the current BES Actions, formatted with a descriptive prompt and an embedded link.

```
links of bes actions
```

Returns a set of <A> tags enclosing all the BES Actions in html format, creating a series of clickable Action links.

```
parameter "action issue date" of action
```

This Inspector returns the date the action was issued, a parameter is added to each action by the BigFix Console.

```
detailed status of result from (bes computer whose (id of itis1234567)) of
(bes action whose (id of itis1234))
```

Returns the detailed status of the specified action on the given computer.

```
detailed statuses of results of (bes action whose (id of itis1234))
```

Returns a detailed status list containing the results of BES Actions with the specified ID.

```
size of (set of bes actions)
```

Returns the current number of BES Actions.

### BES Action Set

These Inspectors return the iterated list of BES Actions, converted into a set to make it easy to do set arithmetic with the list.

### Examples

```
names of elements of (set of bes actions)
```

Returns a list of names of each of the current BES Actions.

```
names of elements of bes action set
```

Returns the names of all the BES Actions.

### BES Action with Multiplicity

These Inspectors handle arrays of BES actions, allowing you to extract unique actions and count them. This object type is derived from the `<bes action>` type and therefore shares the same properties as that type.

### BES Action Status

These Inspectors return information about the status of BES actions, such as whether it is running, evaluating, expired, and more. The status returned from a BES Action can be cast



into a string format to give the text shown in the console. This can be compared for equality using the following constants:

- bes action status fixed
- bes action status running
- bes action status evaluating
- bes action status failed
- bes action status user cancelled
- bes action status download failed
- bes action status locked
- bes action status waiting
- bes action status pending downloads
- bes action status pending restart
- bes action status pending message
- bes action status pending login
- bes action status constrained
- bes action status expired
- bes action status postponed
- bes action status invalid signature
- bes action status error
- bes action status not relevant
- bes action status not reported

### **BES Action Parameter**

A Fixlet can incorporate parameters into its associated Action. When the Fixlet becomes relevant to the network, the BES Console will prompt the user for the value of the parameter. For example, a Fixlet Action might need to start a Windows service specified by the Console user. When the Action is taken, the Console prompts for the name of the service. That value is then passed down to the BES Client and substituted in the local Action script when the script runs.

### **Examples**

```
names of parameters of bes action whose (name of it contains "Download")
```

Returns the parameter names of BES Actions with "Download" in the name.

## BES Action Result

These Inspectors examine the results of BES Actions, which can be used to make reports.

### Examples

```
detailed status of result from (bes computer whose (id of it is 1234567)) of  
(bes action whose (id of it is 1234))
```

Returns the detailed status of the specified action on the given computer.

```
detailed statuses of results of (bes action whose (id of it is 34))
```

Returns the detailed result status of the specified BES Action.

## BES Activation

These Inspectors examine the various Analyses that have been activated on the networked BES Clients.

## BES Baseline

This Inspector iterates over all of the Baseline objects. It is equivalent to:

```
bes fixlets whose ( baseline flag of it )".
```

## BES Baseline Component

These Inspectors return the individual components of a Baseline, such as Fixlets, Tasks, or other Baselines.

## BES Baseline Component Group

Baselines provide a method of grouping Actions from multiple Fixlets, Tasks, or other Baselines. After a Baseline is defined (in the BES Console) the Actions are all grouped for

simultaneous application. This technique allows you to form natural groupings of Actions for a single-click deployment.

## BES Comment

These Inspectors return the text, timestamp, and author of BES Comments.

### Examples

```
(name of author of it, text of it) of comments of bes fixlets
```

Returns a list of all the comments attached to the BES Fixlets, along with the author's name.

## BES Computer

These Inspectors return lists of the computers currently visible from the BES Console.

### Examples

```
names of administered computers of bes user whose (name of it is "Joe")
```

Returns the list of computers currently administered by the BES User named Joe.

```
links (h1 of name of it) of bes computers
```

Returns a list of HTML strings, each with an HTML link named after the BES computer and formatted as a header (h1).

```
links (name of it & "(" & id of it as string & ")") of bes computers
```

Returns an HTML string that will print the name and ID of the computer inside a clickable <A> tag.

```
(br & html "Click <A href='" & link href of it & html "'>here</A> to open  
computer " & id of it as string) of bes computers
```

Returns an html string such as 'Click here to open computer 89201' message that, when clicked, will open the corresponding BES computer document.

```
detailed status of result from (bes action whose (id of itis1234)) of (bes
  computer whose (id of itis1234567))
```

Returns the detailed status of the specified action on the given computer.

```
size of (set of bes computers)
```

This Inspector returns the date the action was issued, a parameter which is added to each action by the BigFix Console.

```
detailed status of result from (bes computer whose (id of itis1234567)) of
  (bes action whose (id of itis1234))
```

Returns the detailed status of the specified action on the given computer.

```
size of (set of bes computers)
```

Returns the current number of BES computers.

### BES Computer Set

These Inspectors convert an iterated list of computers into a set, which allows you to perform intersections, unions, and other mathematical operations on them.

### Examples

```
size of union of applicable computer sets of bes fixlets whose ((source
  severity of itis "Critical")
and (current date - source release date of it > 7 * day)) as floating
  point / size of bes computer set as
  floating point
```

Calculates the ratio of computers that have at least one relevant critical Fixlet released more than 1 week ago.

### BES Computer with Multiplicity

These Inspectors handle arrays of BES computers, allowing you to extract unique computers and count them. This object type is derived from the `<bes computer>` type and therefore shares the same properties as that type.

## BES Computer with Extensions

These Inspectors return an iterated list of computers along with their management extensions.

## BES Computer with Extensions Set

These Inspectors convert an iterated list of computers and their extensions into a set, which allows you to perform intersections, unions, and other mathematical operations on them.

## BES Computer Group

These Inspectors return an iterated list of computer groups, as defined in the BES Console.

### Examples

```
names of bes computer groups
```

Returns a list of the currently defined computer groups, by name.

```
size of (set of bes computer groups)
```

Returns the current number of computer groups.

## BES Computer Group Set

These Inspectors convert an iterated list of computer groups into a set, which allows you to perform intersections, unions, and other mathematical operations on them.

### Examples

```
names of elements of intersection of administered computer sets of bes
users whose
(name of itis "joe" or name of itis "sue")
```

Returns a list of the names of those computers administered by both Sue and Joe.

## BES Computer Group with Multiplicity

These Inspectors handle arrays of BES computer groups, allowing you to extract unique computer groups and count them. This object type is derived from the type and therefore shares the same properties as that type.

## BES Client

These Inspectors return the name, value, and scope of BES Client settings. These are named variables that are used to report on and control various client behaviors.

### Examples

```
(name ofit, scope ofit, value ofit) of client settings of bes computers
```

Returns a list containing the name, scope, and value for each of the BES Client settings for each of the BES Computers.

## UTF-8 String

UTF-8 (8-bit Unicode Transformation Format) is a variable-length character encoding format. It can represent all the characters in the Unicode standard, but it remains backward-compatible with ASCII. These Inspectors are specifically designed for the EvaluateRelevance API as used by BES Wizards.

## BES Deployment

These Inspectors allow you to customize the behavior of your BES deployment. These options are set by the system administrator in the BigFix Administrators Tool, under the Advanced Options tab.

### Examples

```
(name ofit, value ofit) of bes deployment options
```

Returns a list of the names and values of the current BES deployment options.

## BES Domain

In the BES Console, domains are represented as high-level buttons on the left side of the screen. Listing the domains for the Console yields all the currently loaded domains. In Web Reports, only those domains with at least one visible report are listed.

### BES Domain Set

These Inspectors return the current collection of BES Domains as a set, which can be manipulated by intersection, union, and more.

### **BES Domain with Multiplicity**

These Inspectors handle sets of BES Domains, allowing you to extract unique domains and count them. This object type is derived from the type and therefore shares the same properties as that type.

### **BES Filter**

These Inspectors return the filters, which represent the criteria used by the Find command (Ctrl-F in the BES Console). The filters are specific to computers, computer groups, Actions, Analyses, Baselines, Unmanaged Assets, Users, Tasks or Fixlets, and are appropriately flagged.

#### **Examples**

```
names of bes filters
```

Returns a list of the currently defined BES Filters used in the Find (ctrl-F) commands.

```
name of bes filter 2
```

Returns the name of the second BES Filter (a saved Find command).

```
size of (action set of bes filters)
```

Returns the number of BES Filters that were designed for finding Actions.

```
size of (set of bes filters)
```

Returns the current number of defined and saved BES find filters.

### **BES Filter Set**

These Inspectors return the iterated list of BES Filters, converted into a set to make it easy to do set arithmetic with the list.

### **BES Filter with Multiplicity**

These Inspectors handle arrays of BES filters, allowing you to extract unique filters and count them. This object type is derived from the `<bes filter>` type and therefore shares the same properties as that type.

## BES Fixlet

# Error Messages

This section gives a description of the relevance inspector error messages along with possible reasons for each error.

### Singular Expression Refers to Non-Existent Object

This is probably the most common error message you might receive. It usually results from querying a property of an object that does not exist, or querying a non-existent property of an object. For example, the query:

```
Q: version of file "misspelled.dll" of folder "c:\temp"  
E: Singular expression refers to non-existent object.
```

returns **Singular expression refers to non-existent object** if any of the following conditions are true:

1. The folder `c:\temp` does not exist
2. There is no file named `misspelled.dll` in the folder `c:\temp`
3. The file `misspelled.dll` located in the folder `C:\temp` does not have a version.

### A Singular Expression is Required

This error message results from trying to compare two lists or a list to an object. In general, all comparisons must be made between two singular objects. For example:

```
Q: versions of files of folder "c:\temp2" = versions of files of folder "c:  
\temp"
```



```
E: A singular expression is required.
```

returns **A singular expression is required** because comparing two lists is undefined. This will give an error even if both folders contain exactly the same files. Similarly

```
Q: versions of files of folder "c:\temp" = "4.5"
```

```
E: A singular expression is required.
```

gives the same error because you can't compare a list to a single value. You get this error even if there is only one file in the folder `c:\temp` whose version is 4.5.

## It Used Outside of Whose Clause

This is an especially confusing error message because it is perfectly legal to use `it` without a `whose` clause as long as you form the syntax correctly. This message just means that the interpreter does not know what `it` refers to, meaning that there is some syntax error related to the word `it`. For example:

```
Q: system folder (name of it & pathname of it)
```

```
E: "It" used outside of "whose" clause.
```

returns **It used outside of whose clause** because the interpreter does not know what `it` is, as the statement is formulated incorrectly. The correct statement would be:

```
Q: (name of it & pathname of it) of system folder
```

```
A: System32C:\Windows\system32
```

To ensure that `it` points toward an object, you must include `of <object>` after any statement involving `it` (but without `whose`).

## A String Constant had an Improper % Sequence

You can insert characters into a string by entering a percent sign and then the ASCII hex value of the character. If you use a percent sign in a string, the relevance engine looks at the next two characters to see if they correspond to an ASCII hex value. For example:

```
Q: "I'm telling the %22truth%22"
```

```
A: I'm telling the "truth"
```

returns **I'm telling the "truth"**.

A string with a percent sign in it returns **A string constant had an improper % sequence** if any of the following conditions are true:

- There are less than two characters in the string after the % sign.
- Any of the two characters following the percent sign are not standard letters or numbers.

You do not get the error message if the percent sign is followed by letters or numbers but they don't correspond to an ASCII hex value. For example:

```
Q: "Hello said %7 "
E: A string constant had an improper %-sequence.
```

returns **A string constant had an improper % sequence** because the second character after the percent sign is white space. However, the following:

```
Q: "Hello said %9dgsn"
A: Hello said %9dgsn
```

returns **Hello said %9dgsn** as, although %9d isn't an ASCII hex value, both characters are letters and numbers.

## The Operator "<bad\_command>" is Not Defined

You receive this message if you use a word that the relevance interpreter does not recognize, or if you use invalid commands on an object. Here are some examples:

```
Q: exists executable "file_name.exe" of system folder
E: The operator "executable" is not defined.
```

This returns **The operator "exectuable" is not defined** because the word 'executable' is not a valid command in the relevance language.

```
Q: version of key "HLKM/Software" of registry
```

```
E: The operator "version" is not defined.
```

This returns **The operator "version" is not defined** because, although the relevance language knows the word 'version', it does not recognize it as a valid property of registry key.

## The Operator "String" is Not Defined

There is a very common error message that indicates you are trying to return an object that has no default return value. To fix it you just need to query a property of that object. For example:

```
Q: registry
E: Operator "string" is not defined.
```

returns **Operator "string" is not defined**. Although the statement above correctly defines an object that does exist, the relevance language doesn't know what you want to know about that object. Instead, you must either ask if it exists or query a property of the object, for example:

```
Q: exists registry
A: True
Q: value "version" of key "HKEY_LOCAL_MACHINE\SOFTWARE\BigFix
\EnterpriseClient" of registry
A: 9.2.1.48
```

## This Expression Could Not Be Parsed

The first step of interpreting a relevance statement is parsing the expression into its various components. The above message results from a failure of the parsing engine. This is usually caused by unmatched parentheses or by syntax errors involving certain "reserved words" used by the parsing engine. Reserved words are syntactical statements like `of`, `and`, `equals`, and so on. Here are some examples:

```
Q: name of (file whose (version of it = "2.6") of system folder
E: This expression could not be parsed.
```

returns **This expression could not be parsed** because it has more open parentheses than closed ones. This expression

```
Q: exists file "name" of or system folder
E: This expression could not be parsed.
```

returns the same error due to the nonsensical use of the reserved words `of` and `or`.

## A Boolean Expression is Required

This error message is produced when a statement needs a Boolean value to evaluate, but instead the expression returns a different return type. A Boolean value is required after `if` and `whose`. For example, the parenthetical statement after the `whose` in the `whose/it` clause does not return a Boolean value. For example:

```
Q: names of files whose (version of it) of system folder
E: A boolean expression is required.
```

The parenthetical statement, `(version of it)`, after `whose` must return a Boolean value for the expression to make sense. Because the relevance interpreter is expecting a Boolean value and instead finds a version, it returns the error **A boolean expression is required**. Instead the statement should be something like:

```
Q: names of files whose (version of it = "5") of system folder
A: atmfd.dll
A: atmlib.dll
A: charmap.exe
A: comctl32.dll
A: ...
```

The same problem exists in if-then-else statements.

```
Q: if regapp "besclient.exe" then version of regapp "besclient.exe" as
   string else "N/A"
E: A boolean expression is required.
```

This gives an error because a Boolean expression is required after the `if`. Instead the statement should read:

```
Q: if exists regapp "besclient.exe" then version of regapp "besclient.exe"
   as string else "N/A"
A: N/A
```

## Singular Expression Refers to Non-Unique Object

This error message arises when you try to query a singular property of multiple objects. For example:

```
Q: version of files of system folder
A: 6.3.9600.16384
E: Singular expression refers to non-unique object.
```

returns the version of the first file it finds and then the error message **Singular expression refers to non-unique object**. If you want to output a list of all the properties of a list, make sure you make the queries plural. For example:

```
Q: versions of files of system folder
A: 6.3.9600.16384
A: 6.3.9600.16384
A: 6.3.9600.16384
A: ...
```

returns a list of all the versions. If you want a single return value, you must make sure to query just one object. If you want to return a list of properties, the inspector must be plural.

## Incompatible Types

There are certain inspectors that look for return values of the same type. If different types are returned, the relevance interpreter returns **Incompatible Types**. The first example is the if-then-else statement. An if-then-else statement will either return the expression after `then` or after `else`. Both of these expressions must return the same object. For example:

```
Q: if exists regapp "Besconsole.exe" then version of regapp
  "Besconsole.exe" else "Not Installed"
E: Incompatible types.
```

returns **Incompatible types**. This is because the `then` expression returns a version, while the `else` expression returns a string. Instead you must make sure that both statements return the same type by converting the version to a string.

```
Q: if exists regapp "Besconsole.exe" then version of regapp
  "Besconsole.exe" as string else "Not Installed"
A: Not Installed
```

The same issue exists when you create a list with semicolons:

```
Q: running applications; names of recent applications
E: Incompatible types.
```

returns **Incompatible types** because it is trying to create a list of running applications and strings.

## This Expression Contained a Character Which is Not Allowed

This error message is often given when the relevance interpreter finds a character that it does not recognize. You can use any character you want in a string except `"`, but outside of a string a random character will break the relevance statement. For example:

```
Q: {pathname of regapp "besclient.exe"}
E: This expression contained a character which is not allowed.
```

returns **This expression contained a character which is not allowed** because curly braces are not valid in the relevance language, although they represent a relevance substitution in an action script.

## No Inspector Context

Certain inspectors can only be evaluated by the BigFix Client and therefore do not work in QNA. If you try to evaluate one of these in QNA, you will receive **No inspector context**. A common example is:

```
Q: pending restart
E: No inspector context.
```

In general, to evaluate statements that return **No inspector context** you must define them as retrieved properties in the Console.

## A String Constant Had No Ending Quotation Mark

This message is fairly self-explanatory. It means that there was an uneven number of quotation marks in the expression. Here is an example:

```
Q: version of file "msh.dll of system folder
E: A string constant had no ending quotation mark.
```

# Chapter 3. Tutorial

This quick tutorial provides you with an introduction to Relevance language, its general structure, and hands-on practice on writing your first Relevance queries. It would take you about 20 minutes to complete.

The Relevance language forms the basis for most Bigfix content. It can be found in Computer Properties, and in Fixlets and Tasks.

Computer Properties are just evaluations of a Relevance query. Whether or not Fixlet messages or Tasks appear relevant in the Bigfix Console is dictated by Relevance clauses, which are written in the BigFix Relevance Language. A Fixlet message may contain many relevance clauses, all of which must return True for it to become **relevant** for a certain computer. An expression will only lead to a Fixlet message becoming relevant if it successfully evaluates to True.

This quick tutorial introduces the most common Relevance features. Use the embedded online Relevance evaluator to practice writing Relevance queries. You can use the QnA program or the Online Evaluator as well to run your queries. The tutorial also guides you to navigate through other resources found in this website.

After completing the tutorial, you should be able to read and write common Relevance queries, and make use of available resources to learn more advanced features.

## Object Types

The Relevance Language is built upon a multitude of objects and their various properties. There are many types of objects (strings, integers, registry objects, versions, etc.), but sometimes it might be difficult to figure out which object type you have and which you need. It is useful to think of the Relevance Language in terms of objects and properties. Most queries are properties of an object that produce another object.

The Reference section lists down all available Relevance object types. Let's take environment variable for our example. As you can see under environment variable reference page, there are three sections: Creation, Properties, and Casts. Some other object types might have an additional section called Operators.



The Creation section shows you all the ways you can produce an "environment variable" object. For example, you can run a query of the form:

```
variable <string> of <environment>
```

where the <string> is the name of the environment variable, and <environment> is the object corresponding to the environment. The following query returns you environment variable "PATH":

```
Q: variable "PATH" of environment
A: PATH = /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
T: environment variable
```

You can also get a list of all your environment variables by typing:

```
Q: variables of environment
A: HOME = /root
A: HOSTNAME = cdd0565da555
A: NODE_ENV = production
A: PATH = /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
A: PORT = 5002
T: environment variable
```

If you have doubts about how to create an environment object, you can look up the reference page for object, and look at the Creation section. As it turns out, you create an environment object by just writing "environment".

Notice the difference in plurality of `variable` between the two relevance clauses. Use the singular form when expect exactly one result, and use the plural form otherwise.

You can query the various properties of the `environment variable` object. To return the name or value of the environment variable, use the following commands respectively:

```
Q: name of variable "PATH" of environment
A: PATH
T: string
```

```
Q: value of variable "PATH" of environment
A: /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
T: string
```

Some object types are convertible to other object types by using the keyword `as`. This conversion is called *Casting*. For instance, you can cast an integer to string as follows:

```
500 as string
```

Evaluate the query and notice that the returned type is "string" instead of "integer". You can find under a reference page's Casts section the list of the data types to which an object can be casted.

## Relevance in Fixlet

In Fixlet messages, Relevance expressions are used to determine whether the Fixlet is applicable to an endpoint. Thus the Relevance must return a Boolean value (either True or False). Although there are a few inspectors that return a Boolean value, there are two main ways to obtain a Boolean value: existence and comparison. You will use one of these tools in most relevance clauses.

### Existence

In its most basic form, a relevance expression can check for the existence of an object on the users' computer. Let's say that you want to write a Fixlet that must be relevant on all computers where a "hosts" file is located in the "/etc" folder. This is the query that you can run to evaluate the Fixlet relevance:

```
Q: exists file "/etc/hosts"
A: True
T: boolean
```

The file "/etc/hosts" defines a file object. The result of the `exists` operator is a Boolean value. In this case, the query returns True if the file exists or False if it doesn't. Therefore, a Fixlet message with the following relevance clause as applicability relevance, would cause

all computers with the file `"/etc/hosts"` to report as relevant. You can also check for a folder using a similar syntax:

```
Q: exists folder "/var/tmp"
A: True
T: boolean
```

## Comparison

The second basic form of a Relevance clause involves the comparison of two expressions. This is an example of this form that uses the equal sign as comparator:

```
Q: number of processors = 1
A: True
T: boolean
```

The result of the query is True if both expressions are equal to each other, and False otherwise. Different object types have different comparison operators. In the above example, the "equal" sign compares an integer object, the result of the `number of processors` expression, to another integer. You can find the list of comparison operators for each object type under the "Operators" section of its reference page. For example, reference page for version shows that you can perform the following comparisons between a version object and another version object, or between a version object and a string: `<`, `<=`, `=`, `>=`, `>`.

## Advanced Relevance syntax

The previous sections provided you with the basic Relevance language features and the resources to explore all the available Relevance object types. This section introduces a more advanced syntax to help you understand the full capability of the Relevance language.

### Whose/It – Filtering a list

In the previous examples, you retrieved all the files of a folder, or a file with a specific file path, but you didn't select files with a certain characteristic. To do this, you must use a special syntax built into the Relevance Language using the keywords `whose` and `it`. First, let's start with a general list:

```
files of folder "/etc"
```

This result of this query is the list of all the files contained in the "/etc" folder. If, instead of getting all the files, you want to get the files whose filename ends with ".conf", you must use the `whose` clause. Let's see how:

```
files whose (name of it ends with ".conf") of folder "/etc"
```

This clause iterates through all the files in the folder and returns only the files for which the `whose` clause returns `True`. In this example, `it` refers to each file in the "/etc" folder. If you are wondering how `ends with` is used, check out the reference page for string. You will see that `ends with` is also an operator, similar to `>=` used in the previous example.

You can learn more about the `whose` clause by watching the following [video](#).

### Using "it" without a "whose"

The keyword `it` can also be used outside of a `whose` clause to refer to each single element of previous object. For instance,

```
Q: it of files of folder "/etc"
```

is the same as

```
Q: files of folder "/etc"
```

A common use of `it` is to retrieve multiple properties of an object. The following Relevance returns file name and size of the files:

```
(name of it, size of it) of files of folder "/etc"
```

This query also makes use of a new object type called "tuple". A tuple is a compound type composed of two or more other types. Evaluate the relevance above and notice its returned type. For more information about tuples, watch the following [video](#).

### If/Then/Else

The Relevance language also supports If/Then/Else clause to return different objects depending on whether a condition evaluates to `True` or `False`. The general syntax is:

```
if <conditional-expression> then <expression1> else <expression2>
```

Both <expression1> and <expression2> must have the same type, and <conditional-expression> must be a singular boolean. For more information, watch the following [video](#).

The following query returns the string "Yes" if the rpm package "libxml2" exists, and "No" otherwise:

```
Q: if (exists packages "libxml2" of rpm) then "Yes" else "No"
```

```
A: Yes
```

# Chapter 4. Relevance Language Reference

## Client

### **administrative rights**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu

Creation:

- administrative rights of <client> : administrative rights

Properties:

- enabled of <administrative rights> : boolean

### **client**

The client object allows access to properties of the client application hosting the relevance evaluation, typically a BigFix program. In addition, the client maintains a collection of settings with both name and value properties that are inspectable using the client object. These inspectors share properties of application types, such as version and size.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- client : client

#### Properties:

- administrative rights of <client> : administrative rights
- administrator <string> of <client> : setting
- administrator of <client> : setting
- agent interface <string> of <client> : agent interface
- agent interface of <client> : agent interface
- authenticating of <client> : boolean
- banned prefetch plugin <client> : string
- banned prefetch plugin of <client> : string
- brand of <client> : string
- build target of <client> : string
- certificate of <client> : x509 certificate
- character set <client> : string
- character set of <client> : string
- data folder of <client> : folder
- deployment character set of <client> : string
- evaluationcycle of <client> : evaluation cycle
- fxf character set of <client> : string
- info of <client> : string
- last command time of <client> : time
- last report time of <client> : time
- local character set of <client> : string
- manual group <string> of <client> : manual group
- manual group of <client> : manual group
- process owner of <client> : client process owner
- registration address of <client> : ipv4or6 address
- registration cidr address of <client> : string
- registration mac address of <client> : string
- registration subnet address of <client> : ipv4or6 address

- report character set of <client> : string
- setting <string> of <client> : setting
- setting of <client> : setting
- storage folder of <client> : folder
- upload progress of <client> : string
- version of <client> : version

## client process owner

The <client process owner> inspectors tell what user context the client is running in.

### Version Platforms

8.0.584.0Mac

Creation:

- process owner of <client> : client process owner

Properties:

- long name of <client process owner> : string
- name of <client process owner> : string
- short name of <client process owner> : string

Casts:

- <client process owner> as string : string

## client\_cryptography

The <client\_cryptography> inspectors expose cryptographic properties exclusive to the client.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu



**Version****Platforms**

9.5.13.130Raspbian

Creation:

- client cryptography : client\_cryptography

Properties:

- desired encrypt report of <client\_cryptography> : boolean
- encrypt report failure message of <client\_cryptography> : string
- encrypt report of <client\_cryptography> : boolean

**cloud provider**

This inspector retrieves specific cloud provider data from a client that is installed on a machine hosted on a cloud provider. You can deactivate the inspector by setting `_BESClient_Inspector_DisableCloudProvider` to 1. In this case, the output of the inspector calls will be `cloud provider inspector is disabled`. **Note:** The cloud inspectors support virtual environments for AWS and Azure only.

**Version****Platforms**

10.0.0.0AIX, Debian, Mac, Raspbian, Red Hat, SUSE, Solaris, Ubuntu, Windows

Creation:

- cloud provider : cloud provider

Properties:

- instance data of <cloud provider> : json value
- name of <cloud provider> : string
- private ip of <cloud provider> : string
- region of <cloud provider> : string
- unique id of <cloud provider> : string
- version of <cloud provider> : string

## cryptography

This is a global object that has several properties that expose the state of the cryptography controls. BigFix uses cryptographic functions throughout the BigFix Platform. Every time an operator logs in to BigFix, creates a new user, starts an action or subscribes to new content, authentication and signature routines are executed using cryptographic libraries based on the FIPS 140-2 standard.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- cryptography : cryptography

Properties:

- desired fips mode of <cryptography> : boolean
- fips mode failure message of <cryptography> : string
- fips mode of <cryptography> : boolean
- version of <cryptography> : string

## current relay

The <current relay> inspectors refer to the BES Server or Relay that the client last registered with.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- current relay : current relay

Properties:

- authenticating of <current relay> : boolean
- version of <current relay> : version

## download server

No documentation exists.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- download server : download server

Properties:

- name of <download server> : string

## download storage folder

Before an Action executes, the download storage folder points to a temporary directory that holds the downloads for the Action. During execution of the Action, those downloads are moved to the standard BigFix \_\_Download folder and the inspector then points there. These inspectors return information about the currently specified download storage folder, and can be used with relevance substitution in download and prefetch Action commands.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

## Version

## Platforms

9.5.13.130Raspbian

Creation:

- download storage folder : download storage folder

Properties:

- total size of <download storage folder> : integer

## evaluation cycle

An Evaluation cycle represents a complete run through all the content available on the BigFix Client, measured in milliseconds. These inspectors return statistics based on the time sampled whenever the client returns to the beginning of its content set. These inspectors require a Client context.

## Version

## Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- evaluationcycle of <client> : evaluation cycle

Properties:

- action duration of <evaluation cycle> : time interval
- action percent of <evaluation cycle> : floating point
- api duration of <evaluation cycle> : time interval
- api percent of <evaluation cycle> : floating point
- archive duration of <evaluation cycle> : time interval
- archive percent of <evaluation cycle> : floating point
- average duration of <evaluation cycle> : time interval

- average of <evaluation cycle> : integer
- client query duration of <evaluation cycle> : time interval
- client query percent of <evaluation cycle> : floating point
- gather duration of <evaluation cycle> : time interval
- gather percent of <evaluation cycle> : floating point
- maximum duration of <evaluation cycle> : time interval
- maximum of <evaluation cycle> : integer
- other duration of <evaluation cycle> : time interval
- other percent of <evaluation cycle> : floating point
- property duration of <evaluation cycle> : time interval
- property percent of <evaluation cycle> : floating point
- quiet mode duration of <evaluation cycle> : time interval
- quiet mode percent of <evaluation cycle> : floating point
- relay select duration of <evaluation cycle> : time interval
- relay select percent of <evaluation cycle> : floating point
- relevance duration of <evaluation cycle> : time interval
- relevance percent of <evaluation cycle> : floating point
- report duration of <evaluation cycle> : time interval
- report percent of <evaluation cycle> : floating point
- sleep duration of <evaluation cycle> : time interval
- sleep percent of <evaluation cycle> : floating point
- total duration of <evaluation cycle> : time interval
- track fixlet of <evaluation cycle> : string

## license

The <license> inspectors are available to inspect the properties of the deployment license.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian
Creation:	

- bes license : license
- client license : license

#### Properties:

- allow unmentioned site of <license> : boolean
- common name of <license> : string
- download hash algorithm of <license> : string
- effective download hash algorithm of <license> : string
- effective signature hash algorithm of <license> : string
- email address of <license> : string
- encryption certificate of <license> : x509 certificate
- enhanced security of <license> : boolean
- evaluation of <license> : boolean
- expiration date of <license> : time
- expiration state of <license> : string
- fips mode of <license> : boolean
- gather url of <license> : string
- maximum seat count of <license> : integer
- organization of <license> : string
- product of <license> : bes product
- registrar number of <license> : integer
- seat count state of <license> : string
- seat of <license> : integer
- sha256 download of <license> : boolean
- signature hash algorithm of <license> : string
- site number of <license> : integer
- start date of <license> : time
- type of <license> : string

## module

No documentation exists.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

8.2.1175.0Mac

9.5.13.130Raspbian

Creation:

- datastore inspector : module
- module : module
- module <string> : module

Properties:

- name of <module> : string
- version of <module> : version
- version string <string> of <module> : string

**registration server**

No documentation exists.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- registration server : registration server

Properties:

- name of <registration server> : string
- now of <registration server> : time
- version of <registration server> : version

## root server

The <root server> inspectors refer to the root server that the Bes Client is currently connected to.

Version	Platforms
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- root server : root server

Properties:

- host name of <root server> : string
- id of <root server> : integer

## selected server

The <selected server> inspectors return information about the BES Server or BES Relay to which the BigFix agent reports.

Version	Platforms
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- selected server : selected server

Properties:

- competition size of <selected server> : integer
- competition weight of <selected server> : integer



- distance of <selected server> : integer range
- full gateway address of <selected server> : ipv4or6 address
- gateway address <integer> of <selected server> : ipv4or6 address
- gateway address of <selected server> : ipv4or6 address
- ip address of <selected server> : ipv4or6 address
- name of <selected server> : string
- port number of <selected server> : integer
- priority of <selected server> : integer
- weight of <selected server> : integer

## setting

A <setting> is a simple object with name and value properties. It is a property of a client, or a property of a site. Settings of a site have a site scope. Settings of the client have a client scope. See the setting' commands in the action guide for more details.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- administrator <string> of <client> : setting
- administrator of <client> : setting
- setting <string> of <client> : setting
- setting <string> of <site> : setting
- setting of <client> : setting
- setting of <manual group> : setting
- setting of <site> : setting

Properties:

- effective date of <setting> : time
- enabled of <setting> : boolean

- name of <setting> : string
- sha256 of <setting> : string
- value of <setting> : string

#### Casts:

- <setting> as string : string

## x509 certificate

X.509 is a public key infrastructure standard, specifying formats for public key certificates and revocations. These inspectors interpret the certificate from a file in the PEM format. They can be used to analyze encryption credentials on decrypting relays or root servers.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

#### Creation:

- certificate of <client> : x509 certificate
- encryption certificate of <license> : x509 certificate
- pem encoded certificate of <file> : x509 certificate

#### Properties:

- invalid after of <x509 certificate> : time
- invalid before of <x509 certificate> : time
- issuer of <x509 certificate> : string
- public key algorithm of <x509 certificate> : string
- serial number of <x509 certificate> : string
- sha1 of <x509 certificate> : string
- signature algorithm of <x509 certificate> : string
- subject common name of <x509 certificate> : string

- subject of <x509 certificate> : string
- version of <x509 certificate> : integer

## action

The <action> objects are the keywords associated with properties available for inspection during the execution of BigFix Actions.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- action : action
- action <integer> : action
- active action : action
- relevant offer action of <site> : action

Properties:

- active count of <action> : integer
- active line number of <action> : integer
- active of <action> : boolean
- active start time of <action> : time
- complete time of <action> : time
- constrained of <action> : boolean
- constraint of <action> : integer
- download failure of <action> : integer
- exit code of <action> : integer
- first active count of <action> : integer
- group leader of <action> : boolean
- header <string> of <action> : fixlet\_header
- header of <action> : fixlet\_header

- id of <action> : integer
- last active line number of <action> : integer
- last active time of <action> : time
- last change time of <action> : time
- offer accepted of <action> : boolean
- offer of <action> : boolean
- origin fixlet id of <action> : integer
- parameter <string> of <action> : string
- pending login of <action> : boolean
- pending of <action> : boolean
- pending restart of <action> : boolean
- pending time of <action> : time
- persistent constraint of <action> : integer
- status of <action> : string
- system constraint of <action> : integer
- waiting for download of <action> : boolean

Casts:

- <action> as string : string

## **action lock state**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- action lock state : action lock state

Properties:

- controller of <action lock state> : string
- effective date of <action lock state> : time
- expiration date of <action lock state> : time
- lock string of <action lock state> : string
- locked of <action lock state> : boolean

Casts:

- <action lock state> as string : string

## analysis

No documentation exists.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- analysis : analysis

Properties:

- last time of <analysis> : time

## fixlet

The <fixlet> inspectors can provide important information about the fixlets at any site.

These inspectors only work in the context of property evaluation, not Fixlet evaluation.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

**Version****Platforms**

9.5.13.130Raspbian

Creation:

- current analysis : fixlet
- fixlet of <site> : fixlet
- relevant fixlet of <site> : fixlet

Properties:

- header <string> of <fixlet> : fixlet\_header
- header of <fixlet> : fixlet\_header
- id of <fixlet> : integer
- relevance of <fixlet> : boolean
- site of <fixlet> : site

**fixlet\_header**

Fixlet headers are name:value pairs that can provide important information about the fixlets at any site. These inspectors only work in the context of property evaluation, not Fixlet evaluation.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- header <string> of <action> : fixlet\_header
- header <string> of <fixlet> : fixlet\_header
- header of <action> : fixlet\_header
- header of <fixlet> : fixlet\_header

Properties:

- name of <fixlet\_header> : string
- normalized date of <fixlet\_header> : date
- value of <fixlet\_header> : string

## manual group

No documentation exists.

### Version

### Platforms

9.1.1065.0 AIX, Debian, HP-UX, Mac, Red Hat, SUSE, Solaris, Ubuntu, Windows

9.5.13.130 Raspbian

Creation:

- manual group <string> of <client> : manual group
- manual group of <client> : manual group

Properties:

- member of <manual group> : boolean
- setting of <manual group> : setting

Casts:

- <manual group> as string : string

## site

A <site> object is provided to access properties of Fixlet sites.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130 Raspbian

Creation:

- current site : site
- site : site
- site <string> : site
- site of <fixlet> : site

#### Properties:

- client folder of <site> : folder
- evaluated of <site> : boolean
- fixlet of <site> : fixlet
- folder of <site> : folder
- gather schedule authority of <site> : string
- gather schedule time interval of <site> : time interval
- group <integer> of <site> : site group
- last gather time of <site> : time
- masthead of <site> : file
- name of <site> : string
- profile of <site> : site profile
- relevant fixlet of <site> : fixlet
- relevant offer action of <site> : action
- setting <string> of <site> : setting
- setting of <site> : setting
- site tag of <site> : string
- site version list of <site> : site version list
- subscribe time of <site> : time
- type of <site> : string
- url of <site> : string
- version of <site> : integer



## site group

The <site group> inspectors return information on the automatic groups defined for a given site.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- group <integer> of <site> : site group

Properties:

- id of <site group> : integer
- member of <site group> : boolean

## site profile

No documentation exists.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	Windows

Creation:

- profile of <site> : site profile

Properties:

- data file of <site profile> : file
- template file of <site profile> : file
- variable <string> of <site profile> : site profile variable
- variable of <site profile> : site profile variable

## site profile variable

No documentation exists.

### Version Platforms

8.0.584.0Windows

Creation:

- variable <string> of <site profile> : site profile variable
- variable of <site profile> : site profile variable

Properties:

- name of <site profile variable> : string
- value of <site profile variable> : string

Casts:

- <site profile variable> as string : string

## site version list

The <site version list> inspectors examine the multidimensional version numbers (ManyVersions) that are used by the Database to reconcile reconnected sites after a DSA failback event.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- site version list <string> : site version list
- site version list of <site> : site version list
- <string> as site version list : site version list

**Properties:**

- component <integer> of <site version list> : integer
- extrema of <site version list> : ( site version list, site version list )
- maximum of <site version list> : site version list
- minimum of <site version list> : site version list
- unique value of <site version list> : site version list with multiplicity

**Casts:**

- <site version list> as string : string

**Operators:**

- <site version list> < <site version list> : boolean
- <site version list> <= <site version list> : boolean
- <site version list> = <site version list> : boolean
- <site version list> contains <site version list> : boolean

**site version list with multiplicity**

The <site version list with multiplicity> inspectors deal with site-version-list arrays, allowing you to extract unique site-version-list values and count them.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

**Creation:**

- unique value of <site version list> : site version list with multiplicity

**Properties:**

- multiplicity of <site version list with multiplicity> : integer

## agent interface

It is a specific usage of the Agent to Agent dll which is an inter-agent communication channel.

### Version Platforms

9.5.5.193Windows

9.5.7.90 Mac

Creation:

- agent interface <string> of <client> : agent interface
- agent interface of <client> : agent interface

Properties:

- capability <string> of <agent interface> : agent interface capability
- capability of <agent interface> : agent interface capability
- client product of <agent interface> : string

## agent interface capability

The specific command or capability that is done over the Agent to Agent interface.

### Version Platforms

9.5.5.193Windows

9.5.7.90 Mac

Creation:

- capability <string> of <agent interface> : agent interface capability
- capability of <agent interface> : agent interface capability

Properties:

- error code of <agent interface capability> : integer
- name of <agent interface capability> : string

- state of <agent interface capability> : string

Casts:

- <agent interface capability> as string : string

## Core

### boolean

The `boolean` type represents a `True` or `False` value.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- access system security permission of <access control entry> : boolean
- account disabled flag of <local user> : boolean
- account disabled flag of <user> : boolean
- accounts operator flag of <local user> : boolean
- accounts operator flag of <user> : boolean
- action flag of <bes filter> : boolean
- active directory of <bes ldap directory> : boolean
- active flag of <bes activation> : boolean
- active of <action> : boolean
- active of <logged on user> : boolean
- admin privilege of <local user> : boolean
- admin privilege of <user> : boolean
- administrator <( bes computer, bes user )> : boolean
- administrator <( bes user, bes computer )> : boolean

- administrator <bes computer> of <bes user> : boolean
- administrator <bes user> of <bes computer> : boolean
- alias of <file> : boolean alias of <network ip interface> : boolean
- allow demand start of <task settings> : boolean
- allow hard terminate of <task settings> : boolean
- allow inbound echo request of <firewall icmp settings> : boolean
- allow inbound mask request of <firewall icmp settings> : boolean
- allow inbound router request of <firewall icmp settings> : boolean
- allow inbound timestamp request of <firewall icmp settings> : boolean
- allow outbound destination unreachable of <firewall icmp settings> : boolean
- allow outbound packet too big of <firewall icmp settings> : boolean
- allow outbound parameter problem of <firewall icmp settings> : boolean
- allow outbound source quench of <firewall icmp settings> : boolean
- allow outbound time exceeded of <firewall icmp settings> : boolean
- allow redirect of <firewall icmp settings> : boolean
- allow unmentioned site of <license> : boolean
- alt source of <ips package> : boolean
- altivec of <processor> : boolean
- analysis flag of <bes filter> : boolean
- analysis flag of <bes fixlet> : boolean
- analysis flag of <bes property> : boolean
- android of <operating system> : boolean
- append permission of <access control entry> : boolean
- appinfodirty of <palm application> : boolean
- architected of <processor> : boolean
- archive of <filesystem object> : boolean
- at compatibility of <task settings> : boolean
- attribute permission of <network share> : boolean
- audit failure of <access control entry> : boolean
- audit failure of <audit policy information> : boolean
- audit success of <access control entry> : boolean
- audit success of <audit policy information> : boolean

- authenticating of <client> : boolean
- authenticating of <current relay> : boolean
- autoboot value of <zone> : boolean
- automatic flag of <bes computer group> : boolean
- backoffice bit <operating system suite mask> : boolean
- backup of <palm application> : boolean
- baseline flag of <bes filter> : boolean
- baseline flag of <bes fixlet> : boolean
- big endian of <operating system> : boolean
- bit <integer> of <bit set> : boolean
- bit <integer> of <integer> : boolean
- blackhole flag of <ipv4 route> : boolean
- blackhole flag of <route> : boolean
- blade bit <operating system suite mask> : boolean
- blob of <sqlite column type> : boolean
- boolean <integer> of <array> : boolean
- boolean <string> : boolean
- boolean <string> of <dictionary> : boolean
- boolean <string> of <preference> : boolean
- boolean of <osxvalue> : boolean
- boolean value <integer> of <wmi select> : boolean
- boolean value of <wmi select> : boolean
- broadcast flag of <ipv4 route> : boolean
- broadcast flag of <route> : boolean
- broadcast support of <network adapter interface> : boolean
- broadcast support of <network adapter> : boolean
- broadcast support of <network ip interface> : boolean
- built in of <firewall open port> : boolean
- cache flag of <ipv4 route> : boolean
- can create actions flag of <bes user> : boolean
- can interact with desktop of <service> : boolean
- can lock flag of <bes user> : boolean

- can send multiple refresh flag of <bes user> : boolean
- can submit queries flag of <bes role> : boolean
- can submit queries flag of <bes user> : boolean
- change notification permission of <access control entry> : boolean
- client evaluated flag of <bes computer group> : boolean
- client installed flag of <bes unmanagedasset> : boolean
- cloned of <route> : boolean cloning flag of <route> : boolean
- close wait of <tcp state> : boolean
- closed of <tcp state> : boolean
- closing of <tcp state> : boolean
- coma bug of <processor> : boolean
- communications bit <operating system suite mask> : boolean
- communications operator flag of <local user> : boolean
- communications operator flag of <user> : boolean
- compressed of <filesystem object> : boolean
- computer flag of <bes filter> : boolean
- computer group flag of <bes action> : boolean
- condemned flag of <route> : boolean
- console connect of <session state change task trigger> : boolean
- console disconnect of <session state change task trigger> : boolean
- constrained of <action> : boolean
- container inherit of <access control entry> : boolean
- continue on errors flag of <bes action> : boolean
- copy prevention of <palm application> : boolean
- correlation flag of <bes computer> : boolean
- create file permission of <access control entry> : boolean
- create folder permission of <access control entry> : boolean
- create link permission of <access control entry> : boolean
- create permission of <network share> : boolean
- create subkey permission of <access control entry> : boolean
- critical of <debianpkg dependency> : boolean
- current status of <SELinux Boolean> : boolean



- currently active of <firewall rule> : boolean
- currently installed of <debian base package> : boolean
- currently installed of <debian versioned package> : boolean
- custom content flag of <bes user> : boolean
- custom flag of <bes fixlet> : boolean
- custom flag of <bes property> : boolean
- custom site flag of <bes fixlet> : boolean
- custom site flag of <bes site> : boolean
- customized of <firewall service> : boolean
- datacenter bit <operating system suite mask> : boolean
- decimal fpu of <processor> : boolean
- default flag of <bes property> : boolean
- default flag of <ipv4 route> : boolean
- default of <route> : boolean
- delclone flag of <route> : boolean
- delete child permission of <access control entry> : boolean
- delete permission of <access control entry> : boolean
- delete permission of <network share> : boolean
- delete tcb of <tcp state> : boolean
- deleted flag of <bes comment> : boolean
- deny type of <access control entry> : boolean
- dep enabled of <process> : boolean
- dependency known of <property> : boolean
- desired encrypt report of <client\_cryptography> : boolean
- desired fips mode of <cryptography> : boolean
- dhcp enabled of <network adapter> : boolean
- dialog flag of <bes wizard> : boolean
- disabled of <Xinetd Service> : boolean
- disabled of <enableable\_file> : boolean
- disabled of <ips authority info> : boolean
- disabled state of <running task> : boolean
- disabled state of <scheduled task> : boolean

- disallow start when on battery of <task settings> : boolean
- divided by zero of <floating point> : boolean
- document flag of <bes wizard> : boolean
- done flag of <route> : boolean
- driver type of <service> : boolean
- dynamic flag of <ipv4 route> : boolean
- dynamic flag of <route> : boolean
- edge traversal allowed of <firewall rule> : boolean
- editable flag of <bes unmanagedasset field> : boolean
- effective access system security permission for <security account> of <access control list> : boolean
- effective access system security permission for <string> of <access control list> : boolean
- effective append permission for <security account> of <access control list> : boolean
- effective append permission for <string> of <access control list> : boolean
- effective change notification permission for <security account> of <access control list> : boolean
- effective change notification permission for <string> of <access control list> : boolean
- effective create file permission for <security account> of <access control list> : boolean
- effective create file permission for <string> of <access control list> : boolean
- effective create folder permission for <security account> of <access control list> : boolean
- effective create folder permission for <string> of <access control list> : boolean
- effective create link permission for <security account> of <access control list> : boolean
- effective create link permission for <string> of <access control list> : boolean
- effective create subkey permission for <security account> of <access control list> : boolean
- effective create subkey permission for <string> of <access control list> : boolean
- effective delete child permission for <security account> of <access control list> : boolean
- effective delete child permission for <string> of <access control list> : boolean

- effective delete permission for <security account> of <access control list> : boolean
- effective delete permission for <string> of <access control list> : boolean
- effective enumerate subkeys permission for <security account> of <access control list> : boolean
- effective enumerate subkeys permission for <string> of <access control list> : boolean
- effective execute permission for <security account> of <access control list> : boolean
- effective execute permission for <string> of <access control list> : boolean
- effective generic all permission for <security account> of <access control list> : boolean
- effective generic all permission for <string> of <access control list> : boolean
- effective generic execute permission for <security account> of <access control list> : boolean
- effective generic execute permission for <string> of <access control list> : boolean
- effective generic read permission for <security account> of <access control list> : boolean
- effective generic read permission for <string> of <access control list> : boolean
- effective generic write permission for <security account> of <access control list> : boolean
- effective generic write permission for <string> of <access control list> : boolean
- effective list permission for <security account> of <access control list> : boolean
- effective list permission for <string> of <access control list> : boolean
- effective maximum allowed permission for <security account> of <access control list> : boolean
- effective maximum allowed permission for <string> of <access control list> : boolean
- effective query value permission for <security account> of <access control list> : boolean
- effective query value permission for <string> of <access control list> : boolean
- effective read attributes permission for <security account> of <access control list> : boolean
- effective read attributes permission for <string> of <access control list> : boolean
- effective read control permission for <security account> of <access control list> : boolean

- effective read control permission for <string> of <access control list> : boolean
- effective read extended attributes permission for <security account> of <access control list> : boolean
- effective read extended attributes permission for <string> of <access control list> : boolean
- effective read permission for <security account> of <access control list> : boolean
- effective read permission for <string> of <access control list> : boolean
- effective set value permission for <security account> of <access control list> : boolean
- effective set value permission for <string> of <access control list> : boolean
- effective synchronize permission for <security account> of <access control list> : boolean
- effective synchronize permission for <string> of <access control list> : boolean
- effective traverse permission for <security account> of <access control list> : boolean
- effective traverse permission for <string> of <access control list> : boolean
- effective write attributes permission for <security account> of <access control list> : boolean
- effective write attributes permission for <string> of <access control list> : boolean
- effective write dac permission for <security account> of <access control list> : boolean
- effective write dac permission for <string> of <access control list> : boolean
- effective write extended attributes permission for <security account> of <access control list> : boolean
- effective write extended attributes permission for <string> of <access control list> : boolean
- effective write owner permission for <security account> of <access control list> : boolean
- effective write owner permission for <string> of <access control list> : boolean
- effective write permission for <security account> of <access control list> : boolean
- effective write permission for <string> of <access control list> : boolean
- embedded nt bit <operating system suite mask> : boolean
- embedded of <operating system> : boolean
- embedded restricted bit <operating system suite mask> : boolean
- enabled of <administrative rights> : boolean

- enabled of <bes wakeonlan status> : boolean
- enabled of <enableable\_file> : boolean
- enabled of <firewall authorized application> : boolean
- enabled of <firewall open port> : boolean
- enabled of <firewall rule> : boolean
- enabled of <firewall service> : boolean
- enabled of <internet connection firewall> : boolean
- enabled of <port mapping> : boolean
- enabled of <scheduled task> : boolean
- enabled of <setting> : boolean
- enabled of <task settings> : boolean
- enabled of <task trigger> : boolean
- enabled of <wifi> : boolean
- encrypt report of <client\_cryptography> : boolean
- encrypted of <plugin store key> : boolean
- end flag of <bes action> : boolean
- enhanced security of <license> : boolean
- enterprise bit <operating system suite mask> : boolean
- enumerate subkeys permission of <access control entry> : boolean
- error flag of <bes property result> : boolean
- established of <tcp state> : boolean
- eula accepted of <bes product> : boolean
- evaluated of <site> : boolean
- evaluation of <license> : boolean
- exceptions allowed of <firewall profile> : boolean
- exclusive ip of <zone> : boolean
- exec shield of <process> : boolean
- execute of <mode\_mask> : boolean
- execute permission of <access control entry> : boolean
- execute permission of <network share> : boolean
- expiration flag of <bes action> : boolean
- extension flag of <bes computer> : boolean

- external site flag of <bes site> : boolean
- f00f bug of <processor> : boolean
- false : boolean
- fast scsi of <scsibus> : boolean
- fdiv bug of <processor> : boolean
- file\_supports\_encryption of <drive> : boolean
- file\_supports\_object\_ids of <drive> : boolean
- file\_supports\_reparse\_points of <drive> : boolean
- file\_supports\_sparse\_files of <drive> : boolean
- file\_volume\_quotas of <drive> : boolean
- filterable flag of <bes unmanagedasset field> : boolean
- fin wait one of <tcp state> : boolean fin wait two of <tcp state> : boolean
- finite of <floating point> : boolean fips mode of <cryptography> : boolean
- fips mode of <license> : boolean firewall enabled of <firewall profile> : boolean
- fixlet flag of <bes filter> : boolean fixlet flag of <bes fixlet> : boolean
- float of <sqlite column type> : boolean fpu exception of <processor> : boolean
- fpu of <processor> : boolean
- frozen of <ips package> : boolean
- fs\_case\_is\_preserved of <drive> : boolean
- fs\_case\_sensitive of <drive> : boolean
- fs\_file\_compression of <drive> : boolean
- fs\_persistent\_acls of <drive> : boolean
- fs\_unicode\_stored\_on\_disk of <drive> : boolean
- fs\_vol\_is\_compressed of <drive> : boolean
- full of <power level> : boolean
- gateway flag of <ipv4 route> : boolean
- gateway flag of <route> : boolean
- generic all permission of <access control entry> : boolean
- generic execute permission of <access control entry> : boolean
- generic read permission of <access control entry> : boolean
- generic write permission of <access control entry> : boolean
- global catalog of <bes ldap directory> : boolean

- globally allowed flag of <bes webui app> : boolean
- globally readable flag of <bes site> : boolean
- globally visible flag of <bes fixlet> : boolean
- grant type of <access control entry> : boolean
- group execute of <filesystem object> : boolean
- group flag of <bes filter> : boolean
- group flag of <bes fixlet> : boolean
- group leader of <action> : boolean
- group logon of <task principal> : boolean
- group member flag of <bes action> : boolean
- group read of <filesystem object> : boolean
- group write of <filesystem object> : boolean
- guest privilege of <local user> : boolean
- guest privilege of <user> : boolean
- has blank sa password of <local mssql database> : boolean
- has extended acl of <filesystem object> : boolean
- hidden flag of <bes action> : boolean
- hidden of <filesystem object> : boolean
- hidden of <palm application> : boolean
- hidden of <task settings> : boolean hidden
- menu of <grub config file> : boolean
- highest runlevel of <task principal> : boolean
- hlt bug of <processor> : boolean
- home directory required flag of <local user> : boolean
- home directory required flag of <user> : boolean
- host flag of <ipv4 route> : boolean
- host flag of <route> : boolean
- hotsync in progress of <hotsync manager> : boolean
- hyperthreading capable : boolean hyperthreading enabled : boolean
- ia64 of <operating system> : boolean
- ibss of <wifi network> : boolean
- ic snoop of <processor> : boolean

- ifref flag of <route> : boolean
- ifscope flag of <route> : boolean
- ignore new instance of <task settings> : boolean
- in agent context : boolean
- in console context : boolean
- in proxy agent context : boolean
- in web reports context : boolean
- inbound connections allowed of <firewall profile> : boolean
- inbound of <firewall rule> : boolean
- include in relevance flag of <bes baseline component> : boolean
- inexact of <floating point> : boolean
- infinite of <floating point> : boolean
- inherit attribute of <metabase value> : boolean
- inherit only of <access control entry> : boolean
- inherited of <access control entry> : boolean
- insert path attribute of <metabase value> : boolean
- inspectability of <application> : boolean
- installed <string> of <rpmdatabase> : boolean
- installed of <ips package> : boolean
- integer of <sqlite column type> : boolean
- interactive token logon of <task principal> : boolean
- interactive token password logon of <task principal> : boolean
- interdomain trust account flag of <local user> : boolean
- interdomain trust account flag of <user> : boolean
- invalid of <floating point> : boolean
- isochronous of <usb> : boolean
- join by intersection flag of <bes filter> : boolean
- keep statistics flag of <bes property> : boolean
- known of <ips package> : boolean
- last ack of <tcp state> : boolean
- launchable of <palm application> : boolean
- leap of <year> : boolean



- legacy of <bes product> : boolean
- list permission of <access control entry> : boolean
- listening of <tcp state> : boolean
- little endian of <operating system> : boolean
- linfo flag of <route> : boolean
- local administrator : boolean
- local flag of <ipv4 route> : boolean
- local flag of <route> : boolean
- locally visible flag of <bes fixlet> : boolean
- locked flag of <bes computer> : boolean
- locked of <action lock state> : boolean
- locked of <file> : boolean
- locked out flag of <local user> : boolean
- locked out flag of <user> : boolean
- loopback flag of <ipv4 route> : boolean
- loopback of <network adapter interface> : boolean
- loopback of <network adapter> : boolean
- loopback of <network ip interface> : boolean
- low of <power level> : boolean
- lua runlevel of <task principal> : boolean
- mac of <operating system> : boolean
- management rights flag of <bes action> : boolean
- manual flag of <bes computer group> : boolean
- master flag of <bes role> : boolean
- master flag of <bes user> : boolean
- master site flag of <bes fixlet> : boolean
- master site flag of <bes site> : boolean
- maximum allowed permission of <access control entry> : boolean
- member of <manual group> : boolean
- member of <site group> : boolean
- message action button flag of <bes action> : boolean
- message allow cancel flag of <bes action> : boolean

- mmu of <processor> : boolean
- modified flag of <ipv4 route> : boolean
- modified flag of <route> : boolean
- multicast flag of <route> : boolean
- multicast support of <network adapter interface> : boolean
- multicast support of <network adapter> : boolean
- multicast support of <network ip interface> : boolean
- multiple flag of <bes action> : boolean
- multiroute flag of <ipv4 route> : boolean
- multivalued of <property> : boolean
- nan of <floating point> : boolean
- no password required flag of <local user> : boolean
- no password required flag of <user> : boolean
- no propagate inherit of <access control entry> : boolean
- none logon of <task principal> : boolean
- nonpersistent flag of <smf property group> : boolean
- normal account flag of <local user> : boolean
- normal account flag of <user> : boolean
- normal of <filesystem object> : boolean
- normal of <floating point> : boolean
- normal of <power level> : boolean
- notifications disabled of <firewall profile> : boolean
- nounzip of <grub module> : boolean
- null dacl of <security descriptor> : boolean
- null of <sqlite column type> : boolean
- master site flag of <bes fixlet> : boolean
- master site flag of <bes site> : boolean
- maximum allowed permission of <access control entry> : boolean
- member of <manual group> : boolean member of <site group> : boolean
- message action button flag of <bes action> : boolean
- message allow cancel flag of <bes action> : boolean
- mmu of <processor> : boolean modified flag of <ipv4 route> : boolean

- modified flag of <route> : boolean multicast flag of <route> : boolean
- multicast support of <network adapter interface> : boolean
- multicast support of <network adapter> : boolean
- multicast support of <network ip interface> : boolean
- multiple flag of <bes action> : boolean multiroute flag of <ipv4 route> : boolean
- multivalued of <property> : boolean nan of <floating point> : boolean
- no password required flag of <local user> : boolean
- no password required flag of <user> : boolean
- no propagate inherit of <access control entry> : boolean
- none logon of <task principal> : boolean
- nonpersistent flag of <smf property group> : boolean
- normal account flag of <local user> : boolean
- normal account flag of <user> : boolean
- normal of <filesystem object> : boolean
- normal of <floating point> : boolean
- normal of <power level> : boolean
- notifications disabled of <firewall profile> : boolean
- nounzip of <grub module> : boolean
- null dacl of <security descriptor> : boolean
- null of <sqlite column type> : boolean
- null sacl of <security descriptor> : boolean
- nx bit of <process> : boolean object inherit of <access control entry> : boolean
- obsolete of <ips package> : boolean
- obsolete pkg of <ips package> : boolean
- offer accepted of <action> : boolean
- offer flag of <bes action> : boolean
- offer of <action> : boolean
- offline of <filesystem object> : boolean
- oktoinstallnewer of <palm application> : boolean
- open of <palm application> : boolean
- operator site flag of <bes action> : boolean
- operator site flag of <bes fixlet> : boolean

- operator site flag of <bes site> : boolean
- other execute of <filesystem object> : boolean
- other read of <filesystem object> : boolean
- other write of <filesystem object> : boolean
- outbound connections allowed of <firewall profile> : boolean
- outbound of <firewall rule> : boolean
- overflow of <floating point> : boolean
- owner flag <bes user> of <bes site> : boolean
- parallel instance of <task settings> : boolean
- password change disabled flag of <local user> : boolean
- outbound connections allowed of <firewall profile> : boolean
- outbound of <firewall rule> : boolean
- overflow of <floating point> : boolean
- owner flag <bes user> of <bes site> : boolean
- parallel instance of <task settings> : boolean
- password change disabled flag of <local user> : boolean
- password change disabled flag of <user> : boolean
- password expiration disabled flag of <local user> : boolean
- password expiration disabled flag of <user> : boolean
- password expired of <local user> : boolean
- password expired of <user> : boolean
- password logon of <task principal> : boolean
- pending license update : boolean
- pending login : boolean
- pending login of <action> : boolean
- pending of <action> : boolean
- pending restart : boolean
- pending restart <string> : boolean
- pending restart of <action> : boolean
- pending status of <SELinux Boolean> : boolean
- permission permission of <network share> : boolean
- perpetual maintenance of <bes product> : boolean

- perpetual of <bes product> : boolean
- personal bit <operating system suite mask> : boolean
- pinned flag of <route> : boolean
- plugged of <power level> : boolean
- plural flag of <bes property result> : boolean
- point to point of <network adapter interface> : boolean
- point to point of <network adapter> : boolean
- point to point of <network ip interface> : boolean
- postaction allow cancel flag of <bes action> : boolean
- powerpc : boolean prcloning flag of <route> : boolean
- pre60 flag of <bes wizard> : boolean
- precache flag of <bes action> : boolean
- prefix flag of <ipv4 route> : boolean
- print operator flag of <local user> : boolean
- print operator flag of <user> : boolean
- private flag of <bes filter> : boolean
- private flag of <bes wizard variable> : boolean
- private flag of <ipv4 route> : boolean
- profile <firewall profile type> of <firewall rule> : boolean
- proto1 flag of <route> : boolean proto2 flag of <route> : boolean
- proto3 flag of <route> : boolean proxied of <hardware> : boolean
- proxy flag of <route> : boolean
- query value permission of <access control entry> : boolean
- queue instance of <task settings> : boolean
- queued state of <running task> : boolean
- queued state of <scheduled task> : boolean
- quiet of <grub bootable image> : boolean
- read attributes permission of <access control entry> : boolean
- read control permission of <access control entry> : boolean
- read extended attributes permission of <access control entry> : boolean
- read of <mode\_mask> : boolean read permission of <access control entry> : boolean
- read permission of <network share> : boolean readonly of <filesystem object> : boolean

- readonly of <palm application> : boolean ready state of <running task> : boolean
- ready state of <scheduled task> : boolean
- reapply flag of <bes action> : boolean
- reference attribute of <metabase value> : boolean
- reject flag of <ipv4 route> : boolean
- reject flag of <route> : boolean
- relay server flag of <bes computer> : boolean
- relevance of <fixlet> : boolean
- relevant <( bes computer, bes fixlet )> : boolean
- relevant <( bes fixlet, bes computer )> : boolean
- relevant <bes computer> of <bes fixlet> : boolean
- relevant <bes fixlet> of <bes computer> : boolean
- relevant flag of <bes fixlet result> : boolean
- remediated flag of <bes fixlet result> : boolean
- remote connect of <session state change task trigger> : boolean
- remote disconnect of <session state change task trigger> : boolean
- remote of <logged on user> : boolean renamed of <ips package> : boolean
- renamed pkg of <ips package> : boolean
- repo registered of <ips authority info> : boolean
- representable in <string> of <binary\_string> : boolean
- representable in utf16 of <binary\_string> : boolean
- representable in utf8 of <binary\_string> : boolean
- representable of <binary\_string> : boolean
- require user absence of <bes action> : boolean
- require user presence of <bes action> : boolean
- requires authoring flag of <bes wizard> : boolean
- reserved flag of <bes property> : boolean
- resetafterinstall of <palm application> : boolean
- resource of <palm application> : boolean
- restart flag of <bes action> : boolean
- restart on idle of <task idle settings> : boolean
- restartandshutdown actionsript privilege allowboth flag of <bes user> : boolean

- restartandshutdown actionscript privilege allowrestartonly flag of <bes user> : boolean
- restartandshutdown actionscript privilege none flag of <bes user> : boolean
- restartandshutdown postaction privilege allowboth flag of <bes user> : boolean
- restartandshutdown postaction privilege allowrestartonly flag of <bes user> : boolean
- restartandshutdown postaction privilege none flag of <bes user> : boolean
- retry wait for reboot flag of <bes action> : boolean root server flag of <bes computer> : boolean
- router flag of <route> : boolean rule group currently enabled <string> of <firewall> : boolean
- rule group enabled <string> of <firewall profile> : boolean
- run on fifth week in month of <monthlydown task trigger> : boolean
- run on first week in month of <monthlydown task trigger> : boolean
- run on fourth week in month of <monthlydown task trigger> : boolean
- run on last day in month of <monthly task trigger> : boolean
- run on last week in month of <monthlydown task trigger> : boolean
- run on second week in month of <monthlydown task trigger> : boolean
- run on third week in month of <monthlydown task trigger> : boolean
- run only when idle of <task settings> : boolean
- run only when network available of <task settings> : boolean
- running of <application usage summary> : boolean
- running of <local mssql database> : boolean
- running of <service> : boolean
- running state of <running task> : boolean
- running state of <scheduled task> : boolean
- s4u logon of <task principal> : boolean
- savedefault of <grub bootable image> : boolean
- script flag of <local user> : boolean
- script flag of <user> : boolean
- secure attribute of <metabase value> : boolean
- secure parameter flag of <bes action> : boolean
- secured of <wifi network> : boolean secured of <wifi> : boolean
- sep bug of <processor> : boolean

- server operator flag of <local user> : boolean
- server operator flag of <user> : boolean
- server trust account flag of <local user> : boolean
- server trust account flag of <user> : boolean
- service account logon of <task principal> : boolean
- service restricted <( string, string )> of <firewall service restriction> : boolean
- session lock of <session state change task trigger> : boolean
- session unlock of <session state change task trigger> : boolean
- set value permission of <access control entry> : boolean
- setgid of <filesystem object> : boolean setgid of <mode> : boolean
- setsrc flag of <ipv4 route> : boolean settings flag of <bes action> : boolean
- setuid of <filesystem object> : boolean
- setuid of <mode> : boolean
- sha256 download of <license> : boolean
- show message flag of <bes action> : boolean
- show other action flag of <bes user> : boolean
- show running message flag of <bes action> : boolean
- shutdown flag of <bes action> : boolean
- single flag of <bes action> : boolean
- single user ts bit <operating system suite mask> : boolean
- small business bit <operating system suite mask> : boolean
- small business restricted bit <operating system suite mask> : boolean
- smt capable of <cpupackage> : boolean
- smt enabled of <cpupackage> : boolean
- smt of <processor> : boolean
- spe double of <processor> : boolean
- spe float of <processor> : boolean
- spe of <processor> : boolean
- start flag of <bes action> : boolean
- start when available of <task settings> : boolean
- static flag of <ipv4 route> : boolean
- static flag of <route> : boolean



- stationery of <file> : boolean
- sticky of <ips authority info> : boolean
- sticky of <mode> : boolean
- stop at duration end of <task repetition pattern> : boolean
- stop existing instance of <task settings> : boolean
- stop on idle end of <task idle settings> : boolean
- stop other actions flag of <bes user> : boolean
- stop when going on battery of <task settings> : boolean
- stream of <palm application> : boolean
- subscribed <( bes computer, bes site )> : boolean
- subscribed <( bes site, bes computer )> : boolean
- subscribed <bes computer> of <bes site> : boolean
- subscribed <bes site> of <bes computer> : boolean
- subscription flag of <bes action> : boolean
- success on custom relevance of <bes action> : boolean
- success on custom relevance of <bes fixlet action> : boolean
- success on original relevance of <bes action> : boolean
- success on original relevance of <bes fixlet action> : boolean
- success on run to completion of <bes action> : boolean
- success on run to completion of <bes fixlet action> : boolean
- syn sent of <tcp state> : boolean
- synchronize permission of <access control entry> : boolean
- system of <filesystem object> : boolean
- targeted by id flag of <bes action> : boolean
- targeted by list flag of <bes action> : boolean
- targeted by property flag of <bes action> : boolean
- task flag of <bes filter> : boolean
- task flag of <bes fixlet> : boolean
- tcp of <socket> : boolean
- temporary duplicate account flag of <local user> : boolean
- temporary duplicate account flag of <user> : boolean
- temporary of <filesystem object> : boolean

- term of <bes product> : boolean
- terminal bit <operating system suite mask> : boolean
- text of <sqlite column type> : boolean
- time wait of <tcp state> : boolean
- top level flag of <bes action> : boolean
- traverse permission of <access control entry> : boolean
- true : boolean tunnel of <network adapter> : boolean
- udp of <socket> : boolean
- underflow of <floating point> : boolean
- unicast responses to multicast broadcast disabled of <firewall profile> : boolean
- uninstalled of <ips package> : boolean
- unix of <operating system> : boolean
- unknown of <ips package> : boolean
- unknown state of <running task> : boolean
- unknown state of <scheduled task> : boolean
- unmanagedasset flag of <bes filter> : boolean
- unmanagedasset privilege scanpoint flag of <bes role> : boolean
- unmanagedasset privilege scanpoint flag of <bes user> : boolean
- unmanagedasset privilege showall flag of <bes role> : boolean
- unmanagedasset privilege showall flag of <bes user> : boolean
- unmanagedasset privilege shownone flag of <bes role> : boolean
- unmanagedasset privilege shownone flag of <bes user> : boolean
- unsupported of <ips package> : boolean
- untargeted flag of <bes action> : boolean
- up flag of <ipv4 route> : boolean
- up flag of <route> : boolean
- up of <network adapter interface> : boolean
- up of <network adapter> : boolean
- up of <network interface> : boolean
- up of <network ip interface> : boolean
- upgradable of <ips package> : boolean
- ups of <power level> : boolean

- urgent flag of <bes action> : boolean
- use ssl of <bes ldap directory> : boolean
- user execute of <filesystem object> : boolean
- user flag of <bes filter> : boolean
- user privilege of <local user> : boolean
- user privilege of <user> : boolean
- user read of <filesystem object> : boolean
- user write of <filesystem object> : boolean
- utc time flag of <bes action> : boolean
- v0 of <ips package> : boolean
- v1 compatibility of <task settings> : boolean
- v1 of <ips package> : boolean
- v2 compatibility of <task settings> : boolean
- value accessible of <symlink> : boolean
- virtual machine of <operating system> : boolean
- virtual memory : boolean virtual of <hardware> : boolean
- visible flag of <bes fixlet> : boolean
- visible of <file> : boolean
- volatile attribute of <metabase value> : boolean
- wait of <Xinetd Service> : boolean
- waiting for download of <action> : boolean
- wake to run of <task settings> : boolean
- wakeonlan enabled of <network adapter> : boolean
- wascloned flag of <route> : boolean
- webui enabled : boolean
- wide16 scsi of <scsibus> : boolean
- wide32 scsi of <scsibus> : boolean
- win32 type of <service> : boolean
- windows of <operating system> : boolean
- wins enabled of <network adapter> : boolean
- winsock2 supported of <network> : boolean
- workstation trust account flag of <local user> : boolean

- workstation trust account flag of <user> : boolean
- wow64 of <process> : boolean
- wow64 of <registry key> : boolean
- wp of <processor> : boolean
- write attributes permission of <access control entry> : boolean
- write dac permission of <access control entry> : boolean
- write extended attributes permission of <access control entry> : boolean
- write of <mode\_mask> : boolean
- write owner permission of <access control entry> : boolean
- write permission of <access control entry> : boolean
- write permission of <network share> : boolean
- x32 of <operating system> : boolean
- x64 of <operating system> : boolean
- xresolve flag of <route> : boolean
- <json value> as boolean : boolean
- <time of day with time zone> = <time of day with time zone> : boolean
- <time of day> < <time of day> : boolean
- <time of day> <= <time of day> : boolean
- <time of day> = <time of day> : boolean
- <time range> = <time range> : boolean
- <time range> contains <time range> : boolean
- <time range> contains <time> : boolean
- <time zone> = <time zone> : boolean
- <version with time> = <string> : boolean
- <version> < <string> : boolean
- <version> < <version> : boolean
- <version> <= <string> : boolean
- <version> <= <version> : boolean
- <version> = <string> : boolean
- <version> = <version> : boolean
- <volume> = <volume> : boolean
- <year> < <year> : boolean

- <year> <= <year> : boolean
- <year> = <year> : boolean

#### Properties:

- conjunction of <boolean> : boolean
- disjunction of <boolean> : boolean
- javascript array <string> of <boolean> : html

#### Casts:

- <boolean> as boolean : boolean
- <boolean> as string : string

#### Operators:

- <boolean> \* <time range> : timed( time range, boolean )
- <boolean> = <boolean> : boolean
- <time range> \* <boolean> : timed( time range, boolean )

## bit set

A small, numbered collection of bits that can be examined and manipulated.

Version	Platforms
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

#### Creation:

- bit <integer> : bit set
- bit set <string> : bit set
- <integer> as bit set : bit set
- <integer> as bits : bit set

## Properties:

- bit <integer> of <bit set> : boolean
- least significant one bit of <bit set> : integer
- left shift <integer> of <bit set> : bit set
- most significant one bit of <bit set> : integer
- one bit of <bit set> : integer
- padded string of <bit set> : string
- right shift <integer> of <bit set> : bit set

## Casts:

- <bit set> as integer : integer
- <bit set> as string : string

## Operators:

- <bit set> \* <bit set> : bit set
- <bit set> + <bit set> : bit set
- <bit set> - <bit set> : bit set
- <bit set> = <bit set> : boolean
- <bit set> contains <bit set> : boolean

## **dummy**

The <dummy> inspectors are place holders for compatability with Windows clients.

### **Version Platforms**

8.0.584.0Mac

Creation:

- service <string> : dummy

## Properties:

- state of <dummy> : string

## dummy type

No documentation exists.

### Version Platforms

8.0.584.0Mac

Creation:

- registry : dummy type

Properties:

- <dummy type> as string : string

## integer

An *integer* is a signed 64-bit value.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- access mode of <access control entry> : integer
- account lockout threshold of <security database> : integer
- accuracy of <dmi electrical\_current\_probe> : integer
- accuracy of <dmi temperature\_probe> : integer
- accuracy of <dmi voltage\_probe> : integer
- ace flag of <access control entry> : integer
- ace type of <access control entry> : integer
- active count of <action> : integer

- active line number of <action> : integer
- address of <dmi management\_device> : integer
- address\_type of <dmi management\_device> : integer
- adjustment <integer> of <processor> : integer
- allocation block count of <volume> : integer
- ansi code page : integer
- applicable computer count of <bes baseline component> : integer
- applicable computer count of <bes fixlet> : integer
- apply count of <bes action result> : integer
- associativity of <dmi cache\_information> : integer
- attributes of <dmi memory\_device> : integer
- audit level of <local mssql database> : integer
- available amount of <ram> : integer
- average of <evaluation cycle> : integer
- backlight feature of <palm device> : integer
- bad password count of <local user> : integer
- bad password count of <user> : integer
- bank\_connections of <dmi memory\_module\_information> : integer
- base\_address of <dmi ipmi\_device\_information> : integer
- battery percentage of <palm device> : integer
- battery voltage of <palm device> : integer
- bios\_characteristics of <dmi bios\_information> : integer
- bios\_rom\_size of <dmi bios\_information> : integer
- bios\_starting\_address\_segment of <dmi bios\_information> : integer
- block size of <filesystem> : integer
- board\_type of <dmi base\_board\_information> : integer
- bogomips of <processor> : integer
- bootup\_state of <dmi system\_enclosure\_or\_chassis> : integer
- brand id of <processor> : integer
- buffered amount of <ram> : integer
- bug revision of <version> : integer
- build number high of <operating system> : integer



- build number low of <operating system> : integer
- build number of <operating system> : integer
- build revision of <version> : integer
- bus\_number of <dmi onboard\_devices\_extended\_information> : integer
- bus\_number of <dmi system\_slots> : integer
- byte <integer> of <file> : integer
- cache\_configuration of <dmi cache\_information> : integer
- cache\_speed of <dmi cache\_information> : integer
- cached amount of <ram> : integer
- capabilities of <dmi system\_reset> : integer
- capability of <processor> : integer
- category of <event log record> : integer
- channel number of <wifi network> : integer
- channel\_type of <dmi memory\_channel> : integer
- chassis\_handle of <dmi base\_board\_information> : integer
- checkpoint of <service> : integer
- client device count of <bes product> : integer
- code page of <local user> : integer
- code page of <user> : integer
- competition size of <selected server> : integer
- competition weight of <selected server> : integer
- component <integer> of <site version list> : integer
- component\_handle of <dmi management\_device\_component> : integer
- computer count of <bes product> : integer computer id : integer
- connections of <dmi out\_of\_band\_remote\_access> : integer
- constraint of <action> : integer
- contained\_element\_count of <dmi system\_enclosure\_or\_chassis> : integer
- contained\_element\_record\_length of <dmi system\_enclosure\_or\_chassis> : integer
- control of <security descriptor> : integer
- cooling\_device\_handle of <dmi system\_power\_supply> : integer
- cooling\_unit\_group of <dmi cooling\_device> : integer
- core of <cpupackage> : integer

- core\_count of <dmi processor\_information> : integer
- core\_enabled of <dmi processor\_information> : integer
- count of <cpupackage> : integer
- count of <fixlet count pair> : integer
- count of <historical computer count> : integer
- count of <monitor power interval> : integer
- country code of <local user> : integer
- country code of <user> : integer
- cpu speed : integer
- cpuid level of <processor> : integer
- cpus configured of <processor> : integer
- cpus reserved of <processor> : integer
- cpus standby of <processor> : integer
- cpus total of <processor> : integer
- current\_interleave of <dmi memory\_controller\_information> : integer
- current\_memory\_type of <dmi memory\_module\_information> : integer
- current\_speed of <dmi memory\_module\_information> : integer
- current\_speed of <dmi processor\_information> : integer
- current\_sram\_type of <dmi cache\_information> : integer
- current\_usage of <dmi system\_slots> : integer
- data\_width of <dmi memory\_device> : integer
- database id of <bes action> : integer
- database id of <bes activation> : integer
- database id of <bes computer group> : integer
- database id of <bes computer> : integer
- database id of <bes deployment option> : integer
- database id of <bes property> : integer
- database id of <bes server> : integer
- database id of <bes wakeonlan status> : integer
- database id of <bes wizard> : integer
- database id of <historical computer count> : integer
- database id of <historical fixlet count> : integer

- design\_capacity of <dmi portable\_battery> : integer
- design\_capacity\_multiplier of <dmi portable\_battery> : integer
- design\_voltage of <dmi portable\_battery> : integer
- device\_chemistry of <dmi portable\_battery> : integer
- device\_error\_address of <dmi b32\_bit\_memory\_error\_information> : integer
- device\_error\_address of <dmi b64\_bit\_memory\_error\_information> : integer
- device\_function\_number of <dmi onboard\_devices\_extended\_information> : integer
- device\_function\_number of <dmi system\_slots> : integer
- device\_set of <dmi memory\_device> : integer
- device\_type <integer> of <dmi on\_board\_devices\_information> : integer
- device\_type of <dmi on\_board\_devices\_information> : integer
- device\_type\_and\_status of <dmi cooling\_device> : integer
- device\_type\_instance of <dmi onboard\_devices\_extended\_information> : integer
- directory count of <volume> : integer disk usage of <bes property> : integer
- display depth of <palm device> : integer
- download failure of <action> : integer
- download size of <bes fixlet> : integer
- effective access mode for <security account> of <access control list> : integer
- effective access mode for <string> of <access control list> : integer
- element of <integer set> : integer
- embedded\_controller\_firmware\_major\_release of <dmi bios\_information> : integer
- embedded\_controller\_firmware\_minor\_release of <dmi bios\_information> : integer
- enabled\_size of <dmi memory\_module\_information> : integer
- encryption feature of <palm device> : integer
- ending\_address of <dmi memory\_array\_mapped\_address> : integer
- ending\_address of <dmi memory\_device\_mapped\_address> : integer
- engine pid of <running task> : integer
- epoch of <rpm package version record> : integer
- epoch of <short rpm package version record> : integer
- error code of <agent interface capability> : integer
- error\_correcting\_capability of <dmi memory\_controller\_information> : integer
- error\_correction\_type of <dmi cache\_information> : integer

- error\_detecting\_method of <dmi memory\_controller\_information> : integer
- error\_granularity of <dmi b32\_bit\_memory\_error\_information> : integer
- error\_granularity of <dmi b64\_bit\_memory\_error\_information> : integer
- error\_operation of <dmi b32\_bit\_memory\_error\_information> : integer
- error\_operation of <dmi b64\_bit\_memory\_error\_information> : integer
- error\_resolution of <dmi b32\_bit\_memory\_error\_information> : integer
- error\_resolution of <dmi b64\_bit\_memory\_error\_information> : integer
- error\_status of <dmi memory\_module\_information> : integer
- error\_type of <dmi b32\_bit\_memory\_error\_information> : integer
- error\_type of <dmi b64\_bit\_memory\_error\_information> : integer
- event\_id of <event log record> : integer
- exit\_code of <action> : integer
- exit\_code of <bes action result> : integer
- extended\_family of <processor> : integer
- extended\_feature\_mask of <processor> : integer
- extended\_model of <processor> : integer
- external\_port of <port mapping> : integer
- external\_clock of <dmi processor\_information> : integer
- external\_connector\_type of <dmi port\_connector\_information> : integer
- family of <network interface> : integer
- family of <processor> : integer
- feature\_mask of <processor> : integer
- feature\_flags of <dmi base\_board\_information> : integer
- file\_count of <filesystem> : integer
- file\_count of <volume> : integer
- first\_active\_count of <action> : integer
- fix\_part of <fileset version record> : integer
- flag of <volume> : integer
- flags of <dmi bios\_language\_information> : integer
- form\_factor of <dmi memory\_device> : integer
- free\_amount of <ram> : integer
- free\_amount of <swap> : integer

- free file count of <filesystem> : integer
- free memory of <palm device> : integer
- free partition count of <volume group> : integer
- free percent of <filesystem> : integer
- free percent of <volume> : integer
- free space of <drive> : integer
- free space of <filesystem> : integer
- free space of <volume> : integer
- gdi object count of <process> : integer
- gestalt <string> : integer
- gid of <filesystem object> : integer
- gid of <symlink> : integer
- greatest integer : integer
- group mask of <filesystem object> : integer
- handle count of <process> : integer
- handspring version of <palm device> : integer
- hardware\_security\_settings of <dmi hardware\_security> : integer
- height of <dmi system\_enclosure\_or\_chassis> : integer
- hexadecet <integer> of <ipv4or6 address> : integer
- hexadecet <integer> of <ipv6 address> : integer
- hexadecimal integer <string> : integer
- hour\_of\_day of <time of day with time zone> : integer
- hour\_of\_day of <time of day> : integer
- i2c\_slave\_address of <dmi ipmi\_device\_information> : integer
- icon index of <file shortcut> : integer
- id of <action> : integer
- id of <bes action> : integer
- id of <bes activation> : integer
- id of <bes baseline component> : integer
- id of <bes computer group> : integer
- id of <bes computer> : integer
- id of <bes filter> : integer

- id of <bes fixlet> : integer
- id of <bes ldap directory> : integer
- id of <bes site file> : integer
- id of <bes site> : integer
- id of <bes unmanagedasset> : integer
- id of <bes user> : integer
- id of <fixlet> : integer
- id of <process> : integer
- id of <processor> : integer
- id of <root server> : integer
- id of <site group> : integer
- id of <user> : integer
- id of <zone> : integer
- index of <grub image choice> : integer
- index of <processor> : integer
- index of <tuple item> : integer
- inheritance of <access control entry> : integer
- input\_current\_probe\_handle of <dmi system\_power\_supply> : integer
- input\_voltage\_probe\_handle of <dmi system\_power\_supply> : integer
- inspector set of <palm device> : integer
- installable\_languages of <dmi bios\_language\_information> : integer
- installed\_size of <dmi cache\_information> : integer
- installed\_size of <dmi memory\_module\_information> : integer
- integer <integer> of <array> : integer integer <string> : integer
- integer <string> of <dictionary> : integer
- integer <string> of <preference> : integer
- integer <string> of <smbios structure> : integer
- integer ceiling of <floating point> : integer
- integer floor of <floating point> : integer
- integer of <osxvalue> : integer
- integer value <integer> of <wmi select> : integer
- integer value of <wmi select> : integer

- interface of <dmi built\_in\_pointing\_device> : integer
- interface\_type of <dmi ipmi\_device\_information> : integer
- interleave\_position of <dmi memory\_device\_mapped\_address> : integer
- interleaved\_data\_depth of <dmi memory\_device\_mapped\_address> : integer
- internal port of <port mapping> : integer
- internal\_connector\_type of <dmi port\_connector\_information> : integer
- io other count of <process> : integer io other size of <process> : integer
- io read count of <process> : integer io read size of <process> : integer
- io write count of <process> : integer io write size of <process> : integer
- ipmi\_specification\_revision of <dmi ipmi\_device\_information> : integer
- irtt of <ipv4 route> : integer irtt of <route> : integer
- item\_handle of <dmi group\_associations> : integer
- item\_type of <dmi group\_associations> : integer
- keyboard type : integer l1\_cache\_handle of <dmi processor\_information> : integer
- l2\_cache\_handle of <dmi processor\_information> : integer
- l3\_cache\_handle of <dmi processor\_information> : integer
- last active line number of <action> : integer
- last task result of <scheduled task> : integer
- least integer : integer least significant one bit of <bit set> : integer
- length of <binary\_string> : integer length of <datafork> : integer
- length of <dmi additional\_information> : integer
- length of <dmi b32\_bit\_memory\_error\_information> : integer
- length of <dmi b64\_bit\_memory\_error\_information> : integer
- length of <dmi base\_board\_information> : integer
- length of <dmi bios\_information> : integer
- length of <dmi bios\_language\_information> : integer
- length of <dmi built\_in\_pointing\_device> : integer
- length of <dmi cache\_information> : integer
- length of <dmi cooling\_device> : integer
- length of <dmi electrical\_current\_probe> : integer
- length of <dmi end\_of\_table> : integer
- length of <dmi group\_associations> : integer

- length of <dmi hardware\_security> : integer
- length of <dmi inactive> : integer
- length of <dmi ipmi\_device\_information> : integer
- length of <dmi management\_device> : integer
- length of <dmi management\_device\_component> : integer
- length of <dmi management\_device\_threshold\_data> : integer
- length of <dmi memory\_array\_mapped\_address> : integer
- length of <dmi memory\_channel> : integer
- length of <dmi memory\_controller\_information> : integer
- length of <dmi memory\_device> : integer
- length of <dmi memory\_device\_mapped\_address> : integer
- length of <dmi memory\_module\_information> : integer
- length of <dmi on\_board\_devices\_information> : integer
- length of <dmi onboard\_devices\_extended\_information> : integer
- length of <dmi out\_of\_band\_remote\_access> : integer
- length of <dmi physical\_memory\_array> : integer
- length of <dmi port\_connector\_information> : integer
- length of <dmi portable\_battery> : integer
- length of <dmi processor\_information> : integer
- length of <dmi system\_boot\_information> : integer
- length of <dmi system\_enclosure\_or\_chassis> : integer
- length of <dmi system\_information> : integer
- length of <dmi system\_power\_controls> : integer
- length of <dmi system\_power\_supply> : integer
- length of <dmi system\_reset> : integer
- length of <dmi system\_slots> : integer
- length of <dmi temperature\_probe> : integer
- length of <dmi voltage\_probe> : integer
- length of <event log record> : integer
- length of <file> : integer length of <resfork> : integer
- length of <rope> : integer length of <smbios structure> : integer
- length of <string> : integer



- line number of <bes action result> : integer
- line number of <file line> : integer
- link count of <filesystem object> : integer
- link count of <symlink> : integer
- link speed of <network adapter> : integer
- local port of <socket> : integer
- location of <dmi physical\_memory\_array> : integer
- location\_and\_status of <dmi electrical\_current\_probe> : integer
- location\_and\_status of <dmi temperature\_probe> : integer
- location\_and\_status of <dmi voltage\_probe> : integer
- logical processor count : integer
- logical ram : integer login mode of <local mssql database> : integer
- loginuid of <process> : integer
- logon count of <local user> : integer
- logon count of <user> : integer lower bound of <integer range> : integer
- lower\_threshold\_critical of <dmi management\_device\_threshold\_data> : integer
- lower\_threshold\_non\_critical of <dmi management\_device\_threshold\_data> : integer
- lower\_threshold\_non\_recoverable of <dmi management\_device\_threshold\_data> : integer
- lpar adjustment of <processor> : integer
- lpar cpus configured of <processor> : integer
- lpar cpus dedicated of <processor> : integer
- lpar cpus reserved of <processor> : integer
- lpar cpus shared of <processor> : integer
- lpar cpus standby of <processor> : integer
- lpar cpus total of <processor> : integer
- lpar number of <processor> : integer
- machine type : integer major number of <volume group> : integer
- major of <device file> : integer
- major revision of <version> : integer
- major version of <operating system> : integer
- management\_device\_handle of <dmi management\_device\_component> : integer

- max\_power\_capacity of <dmi system\_power\_supply> : integer
- max\_speed of <dmi processor\_information> : integer
- maximum of <evaluation cycle> : integer
- maximum partition count of <logical volume> : integer
- maximum seat count of <license> : integer
- maximum storage of <local user> : integer
- maximum storage of <user> : integer
- maximum transmission unit of <network adapter> : integer
- maximum\_cache\_size of <dmi cache\_information> : integer
- maximum\_capacity of <dmi physical\_memory\_array> : integer
- maximum\_channel\_load of <dmi memory\_channel> : integer
- maximum\_error\_in\_battery\_data of <dmi portable\_battery> : integer
- maximum\_memory\_module\_size of <dmi memory\_controller\_information> : integer
- maximum\_value of <dmi electrical\_current\_probe> : integer
- maximum\_value of <dmi temperature\_probe> : integer
- maximum\_value of <dmi voltage\_probe> : integer
- memory usage of <bes property> : integer
- memory\_array\_error\_address of <dmi b32\_bit\_memory\_error\_information> : integer
- memory\_array\_error\_address of <dmi b64\_bit\_memory\_error\_information> : integer
- memory\_array\_handle of <dmi memory\_array\_mapped\_address> : integer
- memory\_array\_handle of <dmi memory\_device> : integer
- memory\_array\_mapped\_address\_handle of <dmi memory\_device\_mapped\_address> : integer
- memory\_device\_count of <dmi memory\_channel> : integer
- memory\_device\_handle of <dmi memory\_channel> : integer
- memory\_device\_handle of <dmi memory\_device\_mapped\_address> : integer
- memory\_device\_load of <dmi memory\_channel> : integer
- memory\_error\_correction of <dmi physical\_memory\_array> : integer
- memory\_error\_information\_handle of <dmi memory\_device> : integer
- memory\_error\_information\_handle of <dmi physical\_memory\_array> : integer
- memory\_module\_voltage of <dmi memory\_controller\_information> : integer
- memory\_type of <dmi memory\_device> : integer

- metric <integer> of <operating system> : integer
- metric of <ipv4 route> : integer
- metric of <route> : integer
- minimum password length of <security database> : integer
- minimum\_value of <dmi electrical\_current\_probe> : integer
- minimum\_value of <dmi temperature\_probe> : integer
- minimum\_value of <dmi voltage\_probe> : integer
- minor number of <logical volume> : integer
- minor of <device file> : integer
- minor revision of <version> : integer
- minor version of <operating system> : integer
- minute\_of\_hour of <time of day with time zone> : integer
- minute\_of\_hour of <time of day> : integer
- mirror count of <logical volume> : integer
- missed run count of <scheduled task> : integer
- mod\_part of <fileset version record> : integer
- model of <processor> : integer
- most significant one bit of <bit set> : integer
- mtu of <ipv4 route> : integer
- mtu of <route> : integer
- multiplicity of <bes action with multiplicity> : integer
- multiplicity of <bes computer group with multiplicity> : integer
- multiplicity of <bes computer with multiplicity> : integer
- multiplicity of <bes domain with multiplicity> : integer
- multiplicity of <bes filter with multiplicity> : integer
- multiplicity of <bes fixlet with multiplicity> : integer
- multiplicity of <bes ldap directory with multiplicity> : integer
- multiplicity of <bes property with multiplicity> : integer
- multiplicity of <bes role with multiplicity> : integer
- multiplicity of <bes site file with multiplicity> : integer
- multiplicity of <bes site with multiplicity> : integer
- multiplicity of <bes unmanagedasset with multiplicity> : integer

- multiplicity of <bes user with multiplicity> : integer
- multiplicity of <bes webui app with multiplicity> : integer
- multiplicity of <bes wizard with multiplicity> : integer
- multiplicity of <date with multiplicity> : integer
- multiplicity of <day of month with multiplicity> : integer
- multiplicity of <day of week with multiplicity> : integer
- multiplicity of <day of year with multiplicity> : integer
- multiplicity of <debian package upstream version with multiplicity> : integer
- multiplicity of <debian package version epoch with multiplicity> : integer
- multiplicity of <debian package version revision with multiplicity> : integer
- multiplicity of <debian package version with multiplicity> : integer
- multiplicity of <fileset version record with multiplicity> : integer
- multiplicity of <floating point with multiplicity> : integer
- multiplicity of <hertz with multiplicity> : integer
- multiplicity of <integer with multiplicity> : integer
- multiplicity of <ipv4 address with multiplicity> : integer
- multiplicity of <ipv4or6 address with multiplicity> : integer
- multiplicity of <ipv6 address with multiplicity> : integer
- multiplicity of <month and year with multiplicity> : integer
- multiplicity of <month with multiplicity> : integer
- multiplicity of <number of months with multiplicity> : integer
- multiplicity of <rate with multiplicity> : integer
- multiplicity of <rpm package release with multiplicity> : integer
- multiplicity of <rpm package version record with multiplicity> : integer
- multiplicity of <rpm package version with multiplicity> : integer
- multiplicity of <service pack with multiplicity> : integer
- multiplicity of <short rpm package version record with multiplicity> : integer
- multiplicity of <site version list with multiplicity> : integer
- multiplicity of <string with multiplicity> : integer
- multiplicity of <technology level with multiplicity> : integer
- multiplicity of <time interval with multiplicity> : integer
- multiplicity of <time of day with multiplicity> : integer

- multiplicity of <time of day with time zone with multiplicity> : integer
- multiplicity of <time range with multiplicity> : integer
- multiplicity of <time with multiplicity> : integer
- multiplicity of <time zone with multiplicity> : integer
- multiplicity of <uuid with multiplicity> : integer
- multiplicity of <version with multiplicity> : integer
- multiplicity of <year with multiplicity> : integer
- mvs count of <bes product> : integer
- nanoseconds value of <smf time> : integer
- next\_scheduled\_power\_on\_day\_of\_month of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_hour of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_minute of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_month of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_second of <dmi system\_power\_controls> : integer
- node type of <xml dom node> : integer nominal\_speed of <dmi cooling\_device> : integer
- nominal\_value of <dmi electrical\_current\_probe> : integer
- nominal\_value of <dmi temperature\_probe> : integer
- nominal\_value of <dmi voltage\_probe> : integer
- non windows server count of <bes product> : integer
- notify version of <palm device> : integer
- nubus map : integer
- number\_of\_additional\_information\_entries of <dmi additional\_information> : integer
- number\_of\_associated\_memory\_slots of <dmi memory\_controller\_information> : integer
- number\_of\_buttons of <dmi built\_in\_pointing\_device> : integer
- number\_of\_contained\_object\_handles of <dmi base\_board\_information> : integer
- number\_of\_memory\_devices of <dmi physical\_memory\_array> : integer
- number\_of\_power\_cords of <dmi system\_enclosure\_or\_chassis> : integer
- numeric type of <drive> : integer numeric value of <string> : integer
- nv\_storage\_device\_address of <dmi ipmi\_device\_information> : integer
- oem code page : integer oem\_defined of <dmi cooling\_device> : integer
- oem\_defined of <dmi electrical\_current\_probe> : integer

- oem\_defined of <dmi system\_enclosure\_or\_chassis> : integer
- oem\_defined of <dmi temperature\_probe> : integer
- oem\_defined of <dmi voltage\_probe> : integer
- oem\_specific of <dmi portable\_battery> : integer
- oemcompanyid of <palm device> : integer
- oemdeviceid of <palm device> : integer
- oemhalid of <palm device> : integer
- offset of <smbios value> : integer
- oldest record number of <event log> : integer
- one bit of <bit set> : integer
- open action count of <bes fixlet> : integer
- options of <port mapping> : integer
- origin fixlet id of <action> : integer
- other mask of <filesystem object> : integer
- page fault count of <process> : integer
- page file usage of <process> : integer
- partition count of <logical volume> : integer
- partition size of <volume group> : integer
- partition\_row\_position of <dmi memory\_device\_mapped\_address> : integer
- partition\_width of <dmi memory\_array\_mapped\_address> : integer
- password history length of <security database> : integer
- patch revision of <version> : integer
- peak page file usage of <process> : integer
- peak working set size of <process> : integer
- performance counter of <operating system> : integer
- persistent constraint of <action> : integer
- physical memory cap of <zone> : integer
- physical processor count : integer physical ram : integer
- pid of <process> : integer pid of <service> : integer
- platform id of <operating system> : integer
- port number of <selected server> : integer
- port of <Xinetd Service> : integer

- port of <bes ldap directory server> : integer
- port of <firewall open port> : integer port\_type of <dmi port\_connector\_information> : integer
- posix capability of <process> : integer
- power\_supply\_characteristics of <dmi system\_power\_supply> : integer
- power\_supply\_state of <dmi system\_enclosure\_or\_chassis> : integer
- power\_unit\_group of <dmi system\_power\_supply> : integer
- ppid of <process> : integer
- primary group id of <local user> : integer
- primary group id of <user> : integer
- priority of <bes ldap directory server> : integer
- priority of <process> : integer
- priority of <selected server> : integer
- priority of <task settings> : integer
- problem id of <active device> : integer
- process id of <logged on user> : integer
- process id of <process> : integer
- processor\_characteristics of <dmi processor\_information> : integer
- processor\_family of <dmi processor\_information> : integer
- processor\_family\_2 of <dmi processor\_information> : integer
- processor\_id of <dmi processor\_information> : integer
- processor\_type of <dmi processor\_information> : integer
- processor\_upgrade of <dmi processor\_information> : integer
- product info numeric of <operating system> : integer
- quota nonpaged pool usage of <process> : integer
- quota paged pool usage of <process> : integer
- quota peak nonpaged pool usage of <process> : integer
- quota peak paged pool usage of <process> : integer
- random integer : integer
- reapplication limit of <bes action> : integer
- record count of <event log> : integer
- record number of <event log record> : integer

- reference count of <ipv4 route> : integer
- reference of <route> : integer
- reference\_designation of <dmi onboard\_devices\_extended\_information> : integer
- registrar number of <license> : integer
- rel\_part of <fileset version record> : integer
- relay distance of <bes computer> : integer
- remote port of <socket> : integer
- reset\_count of <dmi system\_reset> : integer
- reset\_limit of <dmi system\_reset> : integer
- resolution of <dmi electrical\_current\_probe> : integer
- resolution of <dmi temperature\_probe> : integer
- resolution of <dmi voltage\_probe> : integer
- restart count of <task settings> : integer
- retry count of <bes action result> : integer
- retry limit of <bes action> : integer
- rssi of <wifi network> : integer
- rvu count of <bes product> : integer
- sbds\_manufacture\_date of <dmi portable\_battery> : integer
- sbds\_serial\_number of <dmi portable\_battery> : integer
- seat of <license> : integer
- second\_of\_minute of <time of day with time zone> : integer
- second\_of\_minute of <time of day> : integer
- seconds to expiration of <route> : integer
- seconds value of <smf time> : integer
- security\_status of <dmi system\_enclosure\_or\_chassis> : integer
- segment\_group\_number of <dmi onboard\_devices\_extended\_information> : integer
- segment\_group\_number of <dmi system\_slots> : integer
- sent packet count of <route> : integer
- service pack major version of <operating system> : integer
- service pack minor version of <operating system> : integer
- service specific exit code of <service> : integer
- session id of <logged on user> : integer



- session id of <process> : integer
- session of <process> : integer
- shared amount of <ram> : integer
- signal strength of <wifi network> : integer
- site number of <license> : integer
- size of <application usage summary instance> : integer
- size of <array> : integer
- size of <bes action set> : integer
- size of <bes computer group set> : integer
- size of <bes computer set> : integer
- size of <bes domain set> : integer
- size of <bes filter set> : integer
- size of <bes fixlet set> : integer
- size of <bes ldap directory set> : integer
- size of <bes property set> : integer
- size of <bes role set> : integer
- size of <bes site file set> : integer
- size of <bes site set> : integer
- size of <bes unmanagedasset set> : integer
- size of <bes user set> : integer
- size of <bes webui app set> : integer
- size of <bes wizard set> : integer
- size of <datafork> : integer
- size of <dictionary> : integer
- size of <dmi memory\_device> : integer
- size of <file> : integer
- size of <filesystem> : integer
- size of <integer set> : integer
- size of <palm application> : integer
- size of <ram> : integer
- size of <registry key value> : integer
- size of <resfork> : integer

- size of <string set> : integer
- size of <swap> : integer
- size of <type> : integer
- size of <volume> : integer
- sleep timeout of <palm device> : integer
- slot\_characteristics\_1 of <dmi system\_slots> : integer
- slot\_characteristics\_2 of <dmi system\_slots> : integer
- slot\_data\_bus\_width of <dmi system\_slots> : integer
- slot\_id of <dmi system\_slots> : integer
- slot\_length of <dmi system\_slots> : integer
- slot\_type of <dmi system\_slots> : integer
- source id of <bes property> : integer
- speed of <dmi memory\_device> : integer
- starting\_address of <dmi memory\_array\_mapped\_address> : integer
- starting\_address of <dmi memory\_device\_mapped\_address> : integer
- status of <active device> : integer
- status of <dmi processor\_information> : integer
- status of <network adapter> : integer
- stepping of <processor> : integer
- supported\_interleave of <dmi memory\_controller\_information> : integer
- supported\_memory\_types of <dmi memory\_controller\_information> : integer
- supported\_speeds of <dmi memory\_controller\_information> : integer
- supported\_sram\_type of <dmi cache\_information> : integer
- system constraint of <action> : integer
- system\_bios\_major\_release of <dmi bios\_information> : integer
- system\_bios\_minor\_release of <dmi bios\_information> : integer
- system\_cache\_type of <dmi cache\_information> : integer
- temperature\_probe\_handle of <dmi cooling\_device> : integer
- thermal\_state of <dmi system\_enclosure\_or\_chassis> : integer
- thread of <cpupackage> : integer
- thread\_count of <dmi processor\_information> : integer
- threshold\_handle of <dmi management\_device\_component> : integer

- timeout of <dmi system\_reset> : integer
- timeout of <grub config file> : integer
- timer\_interval of <dmi system\_reset> : integer
- tolerance of <dmi electrical\_current\_probe> : integer
- tolerance of <dmi temperature\_probe> : integer
- tolerance of <dmi voltage\_probe> : integer
- total amount of <ram> : integer
- total amount of <swap> : integer
- total memory of <palm device> : integer
- total processor core count : integer
- total run count of <application usage summary instance> : integer
- total run count of <application usage summary> : integer
- total size of <download storage folder> : integer
- total space of <drive> : integer
- total space of <filesystem> : integer
- total space of <volume> : integer
- total\_width of <dmi memory\_device> : integer
- trustee type of <access control entry> : integer
- type of <dmi built\_in\_pointing\_device> : integer
- type of <dmi management\_device> : integer
- type of <dmi system\_enclosure\_or\_chassis> : integer
- type of <network adapter> : integer
- type of <network share> : integer
- type of <processor> : integer
- type of <smbios structure> : integer
- type of <wmi select> : integer
- type\_detail of <dmi memory\_device> : integer
- uid of <filesystem object> : integer uid of <symlink> : integer
- unavailable amount of <ram> : integer
- unknown computer count of <bes baseline component> : integer unlocked computer count of <bes fixlet> : integer
- update level of <operating system> : integer update of <fileset> : integer

- upper bound of <integer range> : integer
- upper\_threshold\_critical of <dmi management\_device\_threshold\_data> : integer
- upper\_threshold\_non\_critical of <dmi management\_device\_threshold\_data> : integer
- upper\_threshold\_non\_recoverable of <dmi management\_device\_threshold\_data> : integer
- use count of <ipv4 route> : integer
- use count of <network share> : integer
- use limit of <network share> : integer
- use of <dmi physical\_memory\_array> : integer
- used amount of <ram> : integer
- used amount of <swap> : integer
- used file count of <filesystem> : integer
- used memory of <palm device> : integer
- used percent of <filesystem> : integer
- used percent of <volume> : integer
- used space of <filesystem> : integer
- used space of <volume> : integer
- user id of <local user> : integer
- user id of <user> : integer
- user mask of <filesystem object> : integer
- user object count of <process> : integer
- value count of <bes property result> : integer
- value of <winrt enumeration> : integer
- vendor id of <palm device> : integer
- vendor\_syndrome of <dmi b32\_bit\_memory\_error\_information> : integer
- vendor\_syndrome of <dmi b64\_bit\_memory\_error\_information> : integer
- ver\_part of <fileset version record> : integer
- version count of <ips package> : integer
- version of <bes site> : integer
- version of <site> : integer
- version of <x509 certificate> : integer
- version ordinal of <ips package> : integer

- vm adjustment of <processor> : integer
- vm cpus configured of <processor> : integer v
- m cpus reserved of <processor> : integer
- vm cpus standby of <processor> : integer
- vm cpus total of <processor> : integer
- voltage of <dmi processor\_information> : integer
- wake\_up\_type of <dmi system\_information> : integer
- weight of <selected server> : integer
- win32 exit code of <service> : integer
- window of <ipv4 route> : integer
- window of <route> : integer
- windows checksum of <file> : integer
- windows server count of <bes product> : integer
- working set size of <process> : integer
- workstation count of <bes product> : integer
- <bes fixlet field value> as integer : integer
- <bit set> as integer : integer
- <day of month> as integer : integer
- <floating point> as integer : integer
- <json value> as integer : integer
- <metabase identifier> as integer : integer
- <metabase type> as integer : integer
- <metabase user type> as integer : integer
- <metabase value> as integer : integer
- <mode\_mask> as integer : integer
- <month> as integer : integer
- <registry key value> as integer : integer
- <smf value> as integer : integer
- <string> as integer : integer
- <year> as integer : integer
- <hertz> / <hertz> : integer
- <number of months> / <number of months> : integer

- <time interval> / <time interval> : integer

#### Properties:

- absolute value of <integer> : integer
- action <integer> : action
- april <integer> : day of year
- april <integer> of <integer> : date
- april of <integer> : month and year
- august <integer> : day of year
- august <integer> of <integer> : date
- august of <integer> : month and year
- bes computer <integer> : bes computer
- bes filter <integer> : bes filter
- bit <integer> : bit set
- bit <integer> of <integer> : boolean
- byte <integer> : binary\_string
- character <integer> : string
- connection status <integer> : connection status
- csidl folder <integer> : folder
- day\_of\_month <integer> : day of month
- december <integer> : day of year
- december <integer> of <integer> : date
- december of <integer> : month and year
- drive <integer> : volume
- event log event type <integer> : event log event type
- extrema of <integer> : ( integer, integer )
- february <integer> : day of year
- february <integer> of <integer> : date
- february of <integer> : month and year
- filesystem <integer> : volume
- firewall action <integer> : firewall action
- firewall local policy modify state <integer> : firewall local policy modify state

- firewall profile type <integer> : firewall profile type
- firewall scope <integer> : firewall scope f
- irewall service type <integer> : firewall service type
- install folder <integer> : folder
- integer <integer> : integer
- integer in <( integer, integer )> : integer
- integer in <( integer, integer, integer )> : integer
- integer to <integer> : integer
- internet protocol <integer> : internet protocol
- ip version <integer> : ip version
- january <integer> : day of year
- january <integer> of <integer> : date
- january of <integer> : month and year
- javascript array <string> of <integer> : html
- july <integer> : day of year
- july <integer> of <integer> : date
- july of <integer> : month and year
- june <integer> : day of year
- june <integer> of <integer> : date
- june of <integer> : month and year
- march <integer> : day of year
- march <integer> of <integer> : date
- march of <integer> : month and year
- maximum of <integer> : integer
- may <integer> : day of year
- may <integer> of <integer> : date
- may of <integer> : month and year
- mean of <integer> : floating point
- media type <integer> : media type
- minimum of <integer> : integer
- month <integer> : month
- november <integer> : day of year

- november <integer> of <integer> : date
- november of <integer> : month and year
- october <integer> : day of year
- october <integer> of <integer> : date
- october of <integer> : month and year
- operating system product type <integer> : operating system
- product type palm device <integer> : palm device
- process <integer> : process
- processor <integer> : processor
- product of <integer> : integer
- random integer of <integer> : integer
- scsibus <integer> : scsibus
- scsidevice <integer> : scsidevice
- september <integer> : day of year
- september <integer> of <integer> : date
- september of <integer> : month and year
- set of <integer> : integer
- set significant digits <integer> of <integer> : integer
- sqrt of <integer> : floating point
- standard deviation of <integer> : floating point
- sum of <integer> : integer
- task action type <integer> : task action type task
- trigger type <integer> : task trigger type
- unique value of <integer> : integer with multiplicity
- volume <integer> : volume
- well known account <integer> : security account
- year <integer> : year
- zone <integer> : zone

#### Casts:

- <integer> as bit set : bit set
- <integer> as bits : bit set



- <integer> as day\_of\_month : day of month
- <integer> as floating point : floating point
- <integer> as hexadecimal : string
- <integer> as integer : integer
- <integer> as month : month
- <integer> as string : string
- <integer> as year : year

#### Operators:

- <integer> : integer
- <floating point> \* <integer> : floating point
- <floating point> + <integer> : floating point
- <floating point> - <integer> : floating point
- <floating point> / <integer> : floating point
- <floating point> < <integer> : boolean
- <floating point> <= <integer> : boolean
- <floating point> = <integer> : boolean
- <format> + <integer> : format
- <hertz> \* <integer> : hertz
- <hertz> / <integer> : hertz
- <integer set> contains <integer> : boolean
- <integer> \* <floating point> : floating point
- <integer> \* <hertz> : hertz
- <integer> \* <integer> : integer
- <integer> \* <number of months> : number of months
- <integer> \* <time interval> : time interval
- <integer> \* <time range> : timed( time range, integer )
- <integer> + <floating point> : floating point
- <integer> + <integer> : integer
- <integer> - <floating point> : floating point
- <integer> - <integer> : integer
- <integer> / <floating point> : floating point

- <integer> / <integer> : integer
- <integer> < <floating point> : boolean
- <integer> < <integer> : boolean
- <integer> < <registry key value type> : boolean
- <integer> < <registry key value> : boolean
- <integer> <= <floating point> : boolean
- <integer> <= <integer> : boolean
- <integer> <= <registry key value type> : boolean
- <integer> <= <registry key value> : boolean
- <integer> = <floating point> : boolean
- <integer> = <integer> : boolean
- <integer> = <registry key value type> : boolean
- <integer> = <registry key value> : boolean
- <integer> mod <integer> : integer
- <number of months> \* <integer> : number of months
- <number of months> / <integer> : number of months
- <registry key value type> < <integer> : boolean
- <registry key value type> <= <integer> : boolean
- <registry key value type> = <integer> : boolean
- <registry key value> < <integer> : boolean
- <registry key value> <= <integer> : boolean
- <registry key value> = <integer> : boolean
- <time interval> \* <integer> : time interval
- <time interval> / <integer> : time interval
- <time range> \* <integer> : timed( time range, integer )

## integer range

No documentation exists.

Version	Platforms
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu

**Version****Platforms**

8.2.1078.0Session

9.5.13.130Raspbian

Creation:

- distance of <selected server> : integer range

Properties:

- lower bound of <integer range> : integer
- upper bound of <integer range> : integer

**integer set**

The integer set inspectors deal with sets of integers, which are essentially lists or arrays with integer elements. Think of them as mathematical sets: you can compare them, subtract them from other sets, and form the union and intersection of multiple sets.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- set of <integer> : integer set

Properties:

- element of <integer set> : integer
- intersection of <integer set> : integer set
- size of <integer set> : integer
- union of <integer set> : integer set

Operators:

- `<integer set> * <integer set>` : integer set
- `<integer set> + <integer set>` : integer set
- `<integer set> - <integer set>` : integer set
- `<integer set> = <integer set>` : boolean
- `<integer set> contains <integer set>` : boolean
- `<integer set> contains <integer>` : boolean

## integer with multiplicity

The `<integer with multiplicity>` inspectors deal with arrays of integers, allowing you to extract unique numbers and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of `<integer>` : integer with multiplicity

Properties:

- multiplicity of `<integer with multiplicity>` : integer

## floating point

The `floating point` type holds a floating-point number, with precision dependent on the computer. It also keeps track of the IEEE floating-point exceptions raised in a calculation and an estimate of the significance with which the number should be expressed when it is converted to a string.

All arithmetic operations are carried out to the full precision of the computer; only conversions to string are affected by the estimated significance.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	Mac, Red Hat, SUSE, Session, Windows
8.1.535.0	Debian, Ubuntu
9.0.586.0	AIX, HP-UX, Solaris
9.5.13.130	Raspbian

Creation:

- action percent of <evaluation cycle> : floating point
- api percent of <evaluation cycle> : floating point
- archive percent of <evaluation cycle> : floating point
- client query percent of <evaluation cycle> : floating point
- correlation coefficient of <exponential projection> : floating point
- correlation coefficient of <linear projection> : floating point
- extrapolation <time> of <exponential projection> : floating point
- extrapolation <time> of <linear projection> : floating point
- failure rate of <statistical bin> : floating point
- floating point <string> : floating point
- gather percent of <evaluation cycle> : floating point
- geometric mean of <statistical bin> : floating point
- kurtosis of <statistical bin> : floating point
- logarithm kurtosis of <statistical bin> : floating point
- logarithm skewness of <statistical bin> : floating point
- logarithm standard deviation of <statistical bin> : floating point
- logarithm variance of <statistical bin> : floating point
- maximum single computer total of <statistical bin> : floating point
- maximum value of <statistical bin> : floating point
- mean computer count of <statistical bin> : floating point
- mean failing computer count of <statistical bin> : floating point
- mean logarithm of <statistical bin> : floating point
- mean nonzero value count of <statistical bin> : floating point
- mean of <integer> : floating point
- mean of <statistical bin> : floating point

- mean successful computer count of <statistical bin> : floating point
- mean total of <statistical bin> : floating point
- mean value count of <statistical bin> : floating point
- mean zero value count of <statistical bin> : floating point
- minimum single computer total of <statistical bin> : floating point
- minimum value of <statistical bin> : floating point
- other percent of <evaluation cycle> : floating point
- property percent of <evaluation cycle> : floating point
- quiet mode percent of <evaluation cycle> : floating point
- random floating point : floating point
- rate <time interval> of <exponential projection> : floating point
- real <integer> of <array> : floating point
- real <string> of <dictionary> : floating point
- real of <osxvalue> : floating point
- relay select percent of <evaluation cycle> : floating point
- relevance percent of <evaluation cycle> : floating point r
- eport percent of <evaluation cycle> : floating point
- skewness of <statistical bin> : floating point
- sleep percent of <evaluation cycle> : floating point
- sqrt of <integer> : floating point
- standard deviation of <integer> : floating point
- standard deviation of <statistical bin> : floating point
- success rate of <statistical bin> : floating point
- total lower bound of <statistical bin> : floating point
- total upper bound of <statistical bin> : floating point
- variance of <statistical bin> : floating point
- <integer> as floating point : floating point
- <json value> as float : floating point
- <string> as floating point : floating point
- <rate> \* <time interval> : floating point
- <time interval> \* <rate> : floating point

Properties:

- divided by zero of <floating point> : boolean
- extrema of <floating point> : ( floating point, floating point )
- finite of <floating point> : boolean
- floating point <floating point> : floating point
- inexact of <floating point> : boolean
- infinite of <floating point> : boolean
- integer ceiling of <floating point> : integer
- integer floor of <floating point> : integer
- invalid of <floating point> : boolean
- less significance <integer> of <floating point> : floating point
- maximum of <floating point> : floating point
- mean of <floating point> : floating point
- minimum of <floating point> : floating point
- more significance <integer> of <floating point> : floating point
- nan of <floating point> : boolean
- normal of <floating point> : boolean
- overflow of <floating point> : boolean
- product of <floating point> : floating point
- relative significance place <integer> of <floating point> : floating point
- relative significance place of <floating point> : floating point
- significance place <integer> of <floating point> : floating point
- significance place of <floating point> : floating point
- significance threshold of <floating point> : floating point
- sqrt of <floating point> : floating point
- standard deviation of <floating point> : floating point
- sum of <floating point> : floating point
- underflow of <floating point> : boolean
- unique value of <floating point> : floating point with multiplicity

#### Casts:

- <floating point> as floating point : floating point

- <floating point> as integer : integer
- <floating point> as scientific notation : string
- <floating point> as standard notation : string
- <floating point> as string : string

#### Operators:

- <floating point> : floating point
- <floating point> \* <floating point> : floating point
- <floating point> \* <integer> : floating point
- <floating point> \* <rate> : rate
- <floating point> + <floating point> : floating point
- <floating point> + <integer> : floating point
- <floating point> - <floating point> : floating point
- <floating point> - <integer> : floating point
- <floating point> / <floating point> : floating point
- <floating point> / <integer> : floating point
- <floating point> / <time interval> : rate
- <floating point> < <floating point> : boolean
- <floating point> < <integer> : boolean
- <floating point> <= <floating point> : boolean
- <floating point> <= <integer> : boolean
- <floating point> = <floating point> : boolean
- <floating point> = <integer> : boolean
- <integer> \* <floating point> : floating point
- <integer> + <floating point> : floating point
- <integer> - <floating point> : floating point
- <integer> / <floating point> : floating point
- <integer> < <floating point> : boolean
- <integer> <= <floating point> : boolean
- <integer> = <floating point> : boolean
- <rate> \* <floating point> : rate
- <rate> / <floating point> : rate



## floating point with multiplicity

The <floating point with multiplicity> inspectors deal with floating point arrays, allowing you to extract unique floating point numbers and count them.

Version	Platforms
8.0.584.0	Mac, Red Hat, SUSE, Session, Windows
8.1.535.0	Debian, Ubuntu
9.0.586.0	AIX, HP-UX, Solaris
9.5.13.130	Raspbian

Creation:

- unique value of <floating point> : floating point with multiplicity

Properties:

- multiplicity of <floating point with multiplicity> : integer

## format

The `format` inspectors make it easier for content authors to create localizable content. Similar in concept to the C `printf` function, they allow you to embed arguments into a formatting string, which is followed by the argument values themselves.

The arguments are numbered and enclosed in curly brackets `{0}` and the values to be substituted are preceded by a plus sign `+`.

Version	Platforms
8.0.584.0	Session, Windows
9.0.777.0	AIX, Debian, HP-UX, Red Hat, SUSE, Solaris, Ubuntu
9.1.1065.0	Mac
9.5.13.130	Raspbian

Creation:

- format <string> : format

## Casts:

- `<format>` as string : string

## Operators:

- `<format>` + `<date>` : format
- `<format>` + `<day of week>` : format
- `<format>` + `<format>` : format
- `<format>` + `<integer>` : format
- `<format>` + `<string>` : format
- `<format>` + `<time interval>` : format
- `<format>` + `<time of day>` : format
- `<format>` + `<time>` : format

## nothing

No documentation exists.

### Version Platforms

8.0.584.0Mac

Creation:

- main gather service : nothing
- relay service : nothing

## rope

The `<rope>` object is a way to efficiently concatenate long strings. String literals in the Relevance language are limited to 512 characters, but internally, they can be any length. Ropes provide a technique for concatenating string literals that is memory-efficient. In general, the Fixlet author will not need to worry about ropes, but they are useful for increasing efficiency.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- rope <string> : rope

Properties:

- length of <rope> : integer

Casts:

- <rope> as string : string

Operators:

- <rope> & <rope> : rope
- <rope> & <string> : rope
- <rope> contains <string> : boolean
- <string> & <rope> : rope

**string**

Strings are typically core objects, but some string inspectors may be client-specific. Note: A string literal is written within double quotes. Special characters must be inserted by using the percent sign followed by 2 hex digits. Special characters include those characters with ASCII codes less than the 'space' character (hex 20) or greater than 'tilde' character (hex 7f) as well as the percent character itself (25 hex). For example, to create a string containing a null character and a percent character use "a null is %00, the percent itself is %25". Conversion to upper and lower case is also provided. String works in combination with the string position and substring data types. A string position is a point within a string. It can be compared to an integer, but it also acts as a pointer within a string so that the

preceding and following text can be extracted. A substring is a part of a larger string. All operations allowed on a string can be performed on a substring. There are two substrings "be" in the string "To be or not to be". The substrings only differ in their positions within the string.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- abstract of <apar> : string
- abstract of <service pack> : string
- abstract of <technology level> : string
- account name of <security identifier> : string
- action script of <bes action> : string
- action script type of <bes action> : string
- address of <zone network interface> : string
- agent type of <bes computer> : string
- agent version of <bes computer> : string
- alias of <ips authority info> : string
- allowed workstations string of <local user> : string
- allowed workstations string of <user> : string
- aol error of <file> : string
- applicability relevance of <bes action> : string
- application name of <firewall rule> : string
- application parameter string of <local user> : string
- application parameter string of <user> : string
- approved ca cert of <ips authority info> : string
- arch of <pkginfo> : string
- architecture of <debian versioned package> : string
- architecture of <debianpkg version> : string
- architecture of <operating system> : string

- architecture of <package> : string
- argument string of <exec task action> : string
- argument string of <file shortcut> : string
- asset\_tag of <dmi base\_board\_information> : string
- asset\_tag of <dmi memory\_device> : string
- asset\_tag of <dmi processor\_information> : string
- asset\_tag\_number of <dmi system\_enclosure\_or\_chassis> : string
- asset\_tag\_number of <dmi system\_power\_supply> : string
- attachment of <email task action> : string
- attribute name of <customized\_attribute> : string
- attribute name of <predefined\_attribute> : string
- attribute type of <customized\_attribute> : string
- attribute value of <customized\_attribute> : string
- author of <task registration info> : string
- bank\_locator of <dmi memory\_device> : string
- banned prefetch plugin <client> : string
- banned prefetch plugin of <client> : string
- base distinguished name of <bes ldap directory> : string
- base flag of <predefined\_device> : string
- base of <patch> : string
- battery type of <palm device> : string
- bcc of <email task action> : string
- bes brand : string bes current wruser : string
- bes language : string
- bios\_release\_date of <dmi bios\_information> : string
- bios\_version of <dmi bios\_information> : string
- body of <email task action> : string
- boot argument <integer> of <grub kernel> : string
- boot argument <integer> of <zone> : string
- boot argument of <grub kernel> : string
- boot argument of <zone> : string
- brand of <client> : string

- brand of <zone> : string
- brand string of <processor> : string
- bssid of <wifi network> : string
- build number of <operating system> : string
- build of <operating system> : string
- build target of <client> : string
- bus extender flag of <predefined\_device> : string
- catalog filename of <predefined\_device> : string
- category of <bes fixlet> : string
- category of <bes property> : string
- category of <ips fmri> : string
- category of <ips package> : string
- category of <ips partial matching fmri> : string
- category of <ips version dependency> : string
- category of <pkginfo> : string
- cc of <email task action> : string
- change method of <predefined\_device> : string
- change status flag of <predefined\_device> : string
- change status of <customized\_device> : string
- channel band of <wifi network> : string
- character <integer> : string
- character set <client> : string
- character set of <client> : string
- charset of <bes fixlet> : string
- charset of <bes wizard> : string
- cidr address of <network adapter interface> : string
- cidr address of <network adapter> : string
- cidr address of <network address list> : string
- cidr address of <network ip interface> : string
- cidr string of <network adapter interface> : string
- cidr string of <network adapter> : string
- cidr string of <network address list> : string

- cidr string of <network ip interface> : string
- class id of <com handler task action> : string
- class of <active device> : string
- class of <predefined\_device> : string
- classname of <registrynode> : string
- client product of <agent interface> : string
- codename of <operating system> : string
- codepage of <file version block> : string
- command line argument <integer> of <process> : string
- command line argument of <process> : string
- comment of <local group> : string
- comment of <local user> : string
- comment of <network share> : string
- comment of <user> : string
- comment of <zone> : string
- common name of <license> : string
- compare\_op of <debianpkg dependency> : string
- component string of <security identifier> : string
- components xml of <bes fixlet> : string
- computer name : string computer of <event log record> : string
- configuration state of <zone> : string
- configuration version of <ips image> : string
- configuration version of <ips repo> : string
- configure method of <predefined\_device> : string
- connwhere of <customized\_device> : string
- constrain by property name of <bes action> : string
- constrain by property relation of <bes action> : string
- constrain by property value of <bes action> : string
- content id of <bes fixlet action> : string
- controller of <action lock state> : string
- cpu of <bes computer> : string
- creator id of <palm application> : string

- csd version of <operating system> : string
- cstring <string> of <dictionary> : string
- cstring of <osxvalue> : string
- current action of <running task> : string
- current\_language of <dmi bios\_language\_information> : string
- custom success relevance of <bes action> : string
- custom success relevance of <bes fixlet action> : string
- cve id list of <bes fixlet> : string
- dashboard id of <bes wizard> : string
- data <string> of <dictionary> : string
- data of <com handler task action> : string
- data of <osxvalue> : string data of <task definition> : string
- database name of <bes action> : string
- database name of <bes computer> : string
- database name of <bes deployment option> : string
- database name of <bes server> : string
- database name of <bes wakeonlan status> : string
- database name of <bes wizard> : string
- database name of <palm application> : string
- date of <bios> : string
- default page name of <bes wizard> : string
- default value of <predefined\_attribute> : string
- define method of <predefined\_device> : string
- definition of <bes property> : string
- deployment character set of <client> : string
- description of <active device> : string
- description of <bes site> : string
- description of <dmi electrical\_current\_probe> : string
- description of <dmi management\_device> : string
- description of <dmi management\_device\_component> : string
- description of <dmi temperature\_probe> : string
- description of <dmi voltage\_probe> : string



- description of <event log record> : string
- description of <fileset> : string
- description of <firewall rule> : string
- description of <ips package> : string
- description of <ips repo> : string
- description of <network adapter> : string
- description of <task registration info> : string
- description\_string of <dmi on\_board\_devices\_information> : string
- destination string of <route> : string
- destination type of <route> : string
- detailed status of <bes action result> : string
- detectable flag of <predefined\_device> : string
- device driver instance of <customized\_device> : string
- device driver name of <predefined\_device> : string
- device name of <connection> : string
- device name of <customized\_attribute> : string
- device name of <filesystem> : string
- device type : string
- device type of <bes computer> : string
- device type of <device file> : string
- device\_description <integer> of <dmi on\_board\_devices\_information> : string
- device\_description of <dmi on\_board\_devices\_information> : string
- device\_locator of <dmi memory\_device> : string
- device\_name of <dmi portable\_battery> : string
- device\_name of <dmi system\_power\_supply> : string
- digest file name of <bes fixlet> : string directory of <palm device> : string
- display category of <bes fixlet> : string
- display category of <bes property> : string
- display name of <bes domain> : string
- display name of <bes fixlet> : string
- display name of <bes property> : string
- display name of <bes site> : string

- display name of <bes wizard> : string
- display name of <service> : string
- display name of <task principal> : string
- display simple name of <bes property> : string
- display source id of <bes fixlet> : string
- display source of <bes fixlet> : string
- display source severity of <bes fixlet> : string
- display value of <bes fixlet field value> : string
- distinguished name error message of <active directory group> : string
- distinguished name error message of <active directory local computer> : string
- distinguished name error message of <active directory local user> : string
- distinguished name of <active directory group> : string
- distinguished name of <active directory local computer> : string
- distinguished name of <active directory local user> : string
- distinguished name of <bes user> : string
- dns domainname of <active directory local computer> : string
- dns domainname of <active directory local user> : string
- dns name : string dns suffix of <network adapter> : string
- documentation of <task registration info> : string
- domain name : string
- domain name of <security identifier> : string
- domain of <active directory local user> : string
- domain of <user> : string
- domainname : string
- download hash algorithm of <license> : string
- driver key value name of <active device> : string
- effective download hash algorithm of <license> : string
- effective signature hash algorithm of <license> : string
- element of <string set> : string
- email address of <license> : string
- encoding of <sqlite database> : string
- encrypt report failure message of <client\_cryptography> : string

- encryption of <wifi> : string
- error message of <bes property result> : string
- excluded interface of <firewall profile> : string
- executable file format of <file> : string
- execution state of <zone> : string
- expiration state of <license> : string
- external\_reference\_designator of <dmi port\_connector\_information> : string
- family name of <network interface> : string
- family name of <processor> : string
- family name of <winrt package id> : string
- family of <dmi system\_information> : string
- family of <processor> : string
- file of <kernel\_extension> : string
- file system type of <drive> : string
- filesystem type of <filesystem> : string
- fips mode failure message of <cryptography> : string
- flag list of <processor> : string
- flag of <Xinetd Service> : string
- flags string of <route> : string
- fmri of <ips fmri> : string
- fmri of <ips package> : string
- fmri of <ips partial matching fmri> : string
- fmri of <ips version dependency> : string
- fputype of <processor> : string
- friendly name of <active device> : string
- friendly name of <network adapter> : string
- from of <email task action> : string
- fru flag of <predefined\_device> : string
- fstype of <filesystem> : string
- full name of <ips fmri> : string
- full name of <ips package> : string
- full name of <ips partial matching fmri> : string

- full name of <ips version dependency> : string
- full name of <local user> : string
- full name of <user> : string
- full name of <winrt package id> : string
- fullsetting of <ips setting pieces> : string
- fxf character set of <bes server> : string
- fxf character set of <client> : string
- gateway string of <route> : string
- gateway type of <route> : string
- gather schedule authority of <site> : string
- gather url of <license> : string
- generic flag of <customized\_attribute> : string
- generic flag of <predefined\_attribute> : string
- greatest revision of <patch> : string
- group filter of <bes ldap directory> : string
- group id of <task principal> : string
- group name of <filesystem object> : string
- group name of <symlink> : string
- group\_name of <dmi group\_associations> : string
- grouping of <firewall rule> : string
- groups error message of <active directory local computer> : string
- groups error message of <active directory local user> : string
- guid of <audit policy information> : string
- guid of <audit policy subcategory> : string
- guid of <connection> : string
- hardware id of <active device> : string
- hexadecimal <string> of <smbios structure> : string
- hexadecimal of <smbios value> : string
- hfs path of <filesystem object> : string
- home directory drive of <local user> : string
- home directory drive of <user> : string
- home directory of <local user> : string

- home directory of <user> : string
- host name : string host name of <root server> : string
- host of <bes ldap directory server> : string
- hostname : string
- hostname of <bes computer> : string
- hypervisor of <operating system> : string
- icmp types\_and\_codes string of <firewall rule> : string
- icon pathname of <file shortcut> : string
- id of <Xinetd Service> : string
- id of <bes domain> : string
- id of <file version block> : string
- id of <predefined\_device> : string
- id of <task action> : string
- id of <task network settings> : string
- id of <task principal> : string
- id of <task trigger> : string
- id of <user> : string
- identity of <execution> : string
- image path of <application usage summary instance> : string
- image path of <service> : string
- image version of <ips image> : string
- index of <sqlite table> : string
- info of <client> : string
- info of <component> : string
- inherited package directory of <zone> : string
- instance guid of <running task> : string
- instance name of <local mssql database> : string
- interface of <firewall rule> : string
- interface of <ipv4 route> : string
- interface of <route> : string
- interface types string of <firewall rule> : string
- intermediate certs of <ips authority info> : string

- internal\_reference\_designator of <dmi port\_connector\_information> : string
- inventory only flag of <predefined\_device> : string
- ip family of <route> : string
- issuer of <x509 certificate> : string
- key <string> of <file section> : string
- key <string> of <file> : string
- key of <dictionary> : string
- key of <dictionaryentry> : string
- key of <user attribute> : string
- label of <logical volume> : string
- language of <file version block> : string
- launcher name of <palm application> : string
- least revision of <patch> : string
- led value of <predefined\_device> : string
- license type of <bes computer> : string
- link href of <bes action> : string
- link href of <bes computer> : string
- link href of <bes domain> : string
- link href of <bes fixlet> : string
- link href of <bes unmanagedasset> : string
- link href of <bes user> : string
- link href of <bes wizard> : string
- local addresses string of <firewall rule> : string
- local character set of <client> : string
- local ports string of <firewall rule> : string
- location information of <active device> : string
- location of <customized\_device> : string
- location of <dmi portable\_battery> : string
- location of <dmi system\_power\_supply> : string
- location of <filesystem object> : string
- location of <symlink> : string
- location\_in\_chassis of <dmi base\_board\_information> : string

- lock string of <action lock state> : string
- locked key <string> of <file> : string
- login account of <service> : string
- login user of <bes ldap directory> : string
- logon script of <local user> : string
- logon script of <user> : string
- logon server of <local user> : string
- logon server of <user> : string
- long name of <client process owner> : string
- lpar characteristics of <processor> : string
- lpar name of <processor> : string
- lpp\_name of <fileset version requirement> : string
- lpp\_name of <fileset> : string
- mac address of <network adapter interface> : string
- mac address of <network adapter> : string
- mac address of <network ip interface> : string
- mac address of <network link interface> : string
- machine name : string
- machine name of <processor> : string
- machine of <operating system> : string
- machine serial number of <processor> : string
- maker of <component> : string
- management extension of <bes computer> : string
- manufacture\_date of <dmi portable\_battery> : string
- manufacturer of <active device> : string
- manufacturer of <dmi base\_board\_information> : string
- manufacturer of <dmi memory\_device> : string
- manufacturer of <dmi portable\_battery> : string
- manufacturer of <dmi system\_enclosure\_or\_chassis> : string
- manufacturer of <dmi system\_information> : string
- manufacturer of <dmi system\_power\_supply> : string
- manufacturer\_name of <dmi out\_of\_band\_remote\_access> : string

- masthead operator name of <bes user> : string md5 of <file> : string
- menu path of <bes wizard> : string
- message <integer> of <message\_catalog\_set> : string
- message body of <show message task action> : string
- message text of <bes action> : string
- message title of <bes action> : string
- mime field <string> of <bes action> : string
- mime field <string> of <bes fixlet> : string
- mirrors of <ips authority info> : string
- model : string model name of <processor> : string
- model of <processor> : string
- model\_part\_number of <dmi system\_power\_supply> : string
- mount option of <filesystem> : string
- mount point of <filesystem> : string
- msg number of <predefined\_device> : string
- name of <SELinux Boolean> : string
- name of <Xinetd Service> : string
- name of <active directory group> : string
- name of <active directory local user> : string
- name of <agent interface capability> : string
- name of <apar> : string
- name of <application usage summary instance> : string
- name of <application usage summary> : string
- name of <audit policy category> : string
- name of <audit policy subcategory> : string
- name of <bes action parameter> : string
- name of <bes action> : string
- name of <bes activation> : string
- name of <bes baseline component group> : string
- name of <bes baseline component> : string
- name of <bes client setting> : string
- name of <bes computer group> : string



- name of <bes computer> : string
- name of <bes deployment option> : string
- name of <bes domain> : string
- name of <bes filter> : string
- name of <bes fixlet field> : string
- name of <bes fixlet> : string
- name of <bes ldap directory> : string
- name of <bes product> : string
- name of <bes property> : string
- name of <bes role> : string
- name of <bes site> : string
- name of <bes unmanagedasset field> : string
- name of <bes user> : string
- name of <bes webui app> : string
- name of <bes wizard variable> : string
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- name of <debian versioned package> : string
- name of <download server> : string
- name of <drive> : string
- name of <environment variable> : string
- name of <filesystem object> : string
- name of <filesystem> : string

- name of <firewall authorized application> : string
- name of <firewall open port> : string
- name of <firewall rule> : string
- name of <firewall service> : string
- name of <fixlet\_header> : string
- name of <hotsync user> : string
- name of <ips authority info> : string
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- name of <ips repo> : string
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- name of <operating system> : string
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- name of <palm application> : string
- name of <palm device> : string
- name of <pkginfo> : string
- name of <plugin store key> : string

- name of <port mapping> : string
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- name of <registration server> : string
- name of <registry key value> : string
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- name of <technology level> : string
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- name of <unary operator> : string
- name of <user> : string

- name of <volume group> : string
- name of <volume> : string
- name of <wifi> : string
- name of <winrt enumeration> : string
- name of <winrt package id> : string
- name of <wmi select> : string
- name of <zone network interface> : string
- name of <zone> : string
- navbar name of <bes wizard> : string
- netbios domainname of <active directory local computer> : string
- netbios domainname of <active directory local user> : string
- netstat flag of <route> : string nls index of <customized\_attribute> : string
- nls index of <predefined\_attribute> : string
- no access of <Xinetd Service> : string
- node name of <xml dom node> : string
- node value of <xml dom node> : string
- oem\_string <integer> of <dmi> : string
- oem\_string of <dmi> : string
- offer category of <bes action> : string
- only from of <Xinetd Service> : string
- operating system of <bes computer> : string
- ordered catalog of <ips image> : string
- ordered catalog of <ips repo> : string
- organization of <license> : string
- origin of <ips authority info> : string
- os version of <palm device> : string
- padded string of <bit set> : string
- param <string> of <pkginfo> : string
- parameter <string> of <action> : string
- parameter <string> of <bes action> : string
- parent logical name of <customized\_device> : string
- parent of <customized\_device> : string

- parent relevance of <bes fixlet> : string
- part\_number of <dmi memory\_device> : string
- part\_number of <dmi processor\_information> : string
- password of <network share> : string
- patch id <string> of <pkgdb> : string
- patch id <string> of <pkginfo> : string
- patch id of <pkgdb> : string
- patch id of <pkginfo> : string
- path of <exec task action> : string
- path of <execution> : string
- path of <grub config file> : string
- path of <grub file location> : string
- path of <network share> : string
- path of <registrynode> : string
- path of <running task> : string
- path of <scheduled task> : string
- path of <task folder> : string
- path of <zone> : string
- pathname of <file shortcut> : string
- pathname of <filesystem object> : string
- pathname of <registry key> : string
- pathname of <symlink> : string
- pending restart name : string
- pkginst of <pkginfo> : string
- pkglibversion of <debianpackagecache> : string
- platform id of <language> : string
- plural name of <property> : string
- policy of <process> : string
- port of <rpc\_program> : string
- posix path of <filesystem object> : string
- possible value of <predefined\_attribute> : string
- postaction message text of <bes action> : string

- postaction message title of <bes action> : string
- preferred bes language : string
- prefix name of <predefined\_device> : string
- prefix of <ips authority info> : string
- previous value of <runlevel> : string
- primary codeset of <language> : string
- primary country of <language> : string
- primary group id of <user> : string
- private ip of <cloud provider> : string
- private variable <string> of <bes wizard> : string
- privilege of <security account> : string
- process image file name of <firewall authorized application> : string
- processor type of <palm device> : string
- processor\_manufacturer of <dmi processor\_information> : string
- processor\_version of <dmi processor\_information> : string
- product info string of <operating system> : string
- product of <dmi base\_board\_information> : string
- product of <scsidevice> : string
- product\_name of <dmi system\_information> : string
- profile folder of <local user> : string
- profile folder of <user> : string
- program of <rpc\_program> : string
- protocol of <Xinetd Service> : string
- protocol of <port mapping> : string
- protocol of <rpc\_program> : string
- proxied urls of <ips authority info> : string
- public key algorithm of <x509 certificate> : string
- publisher id of <winrt package id> : string
- publisher of <ips fmri> : string
- publisher of <ips package> : string
- publisher of <ips partial matching fmri> : string
- publisher of <ips version dependency> : string

- publisher of <winrt package id> : string
- region of <cloud provider> : string
- registration cidr address of <client> : string
- registration mac address of <client> : string
- relation of <capability> : string
- relay hostname of <bes computer> : string
- relay selection method of <bes computer> : string
- relay server of <bes computer> : string
- release of <debian versioned package> : string
- release of <operating system> : string
- releaseid of <operating system> : string
- relevance clause of <bes fixlet> : string
- relevance of <bes baseline component> : string
- relevance of <bes fixlet> : string
- remote addresses of <firewall authorized application> : string
- remote addresses of <firewall open port> : string
- remote addresses of <firewall service> : string
- remote addresses string of <firewall rule> : string
- remote ports string of <firewall rule> : string
- replyto of <email task action> : string
- repo collection type of <ips authority info> : string
- repo description of <ips authority info> : string
- repo legal uris of <ips authority info> : string
- repo name of <ips authority info> : string
- repo refresh seconds of <ips authority info> : string
- repo registration uri of <ips authority info> : string
- repo related uris of <ips authority info> : string
- repo sort policy of <ips authority info> : string
- report character set of <client> : string
- representation flag of <customized\_attribute> : string
- representation flag of <predefined\_attribute> : string
- representation in <string> of <binary\_string> : string

- reserved of <dmi bios\_language\_information> : string
- reserved of <dmi system\_boot\_information> : string
- revision <string> of <patch> : string revision of <patch> : string
- revision of <processor> : string revision of <product> : string
- revision of <scsidevice> : string
- revision\_level of <dmi system\_power\_supply> : string
- revoked ca certs of <ips authority info> : string
- root server of <bes computer> : string
- run mode of <processor> : string
- runlevel of <service> : string
- running message text of <bes action> : string
- running message title of <bes action> : string
- sans id list of <bes fixlet> : string
- sbds\_device\_chemistry of <dmi portable\_battery> : string
- sbds\_version\_number of <dmi portable\_battery> : string
- schedule class of <process> : string
- scheduling class of <zone> : string
- schema of <sqlite table> : string
- scope of <bes client setting> : string
- script of <bes fixlet action> : string
- script type of <bes fixlet action> : string
- seat count state of <license> : string
- section of <debian versioned package> : string
- section of <debianpkg version> : string
- section of <ips setting pieces> : string
- selected groups string of <bes action> : string
- selinux context of <process> : string
- selinux domain of <process> : string
- sequence code of <processor> : string
- serial number of <palm device> : string
- serial number of <x509 certificate> : string
- serial of <hardware> : string



- serial\_number of <dmi base\_board\_information> : string
- serial\_number of <dmi memory\_device> : string
- serial\_number of <dmi portable\_battery> : string
- serial\_number of <dmi processor\_information> : string
- serial\_number of <dmi system\_enclosure\_or\_chassis> : string
- serial\_number of <dmi system\_information> : string
- serial\_number of <dmi system\_power\_supply> : string
- server arg of <Xinetd Service> : string
- server of <Xinetd Service> : string
- server of <email task action> : string
- service key value name of <active device> : string
- service name of <firewall rule> : string
- service name of <service> : string
- session id of <logged on user> : string
- set number of <predefined\_device> : string
- sha1 of <file> : string
- sha1 of <x509 certificate> : string
- sha224 of <file> : string
- sha256 of <file> : string
- sha256 of <setting> : string
- sha2\_224 of <file> : string
- sha2\_256 of <file> : string
- sha2\_384 of <file> : string
- sha2\_512 of <file> : string
- sha384 of <file> : string
- sha512 of <file> : string
- shared variable <string> of <bes wizard> : string
- short name of <client process owner> : string
- signature algorithm of <x509 certificate> : string
- signature hash algorithm of <license> : string
- signature keyid of <package> : string
- signature required names of <ips authority info> : string

- signing ca certs of <ips authority info> : string
- simple name of <bes property> : string
- singular name of <property> : string
- site level relevance of <bes site> : string
- site tag of <site> : string
- site url of <bes product> : string
- size of <kernel\_extension> : string
- sku\_number of <dmi system\_information> : string
- slot\_designation of <dmi system\_slots> : string
- socket type of <Xinetd Service> : string
- socket\_designation of <dmi cache\_information> : string
- socket\_designation of <dmi memory\_module\_information> : string
- socket\_designation of <dmi processor\_information> : string
- source id of <bes fixlet> : string source name of <bes property> : string
- source of <bes fixlet> : string source of <bes unmanagedasset> : string
- source of <event log record> : string
- source of <task registration info> : string
- source relevance of <bes action> : string
- source severity of <bes fixlet> : string
- source severity of <fixlet count pair> : string
- ssid of <wifi network> : string
- ssid of <wifi> : string
- ssl cert of <ips authority info> : string
- ssl key of <ips authority info> : string
- start in pathname of <file shortcut> : string
- start method of <predefined\_device> : string
- start type of <service> : string
- state of <agent interface capability> : string
- state of <bes action> : string
- state of <dummy> : string
- state of <fileset part> : string
- state of <fileset> : string

- state of <processor> : string
- state of <service> : string
- status of <action> : string
- status of <bes activation> : string
- status of <customized\_device> : string
- stop method of <predefined\_device> : string
- string <integer> of <array> : string
- string <string> of <dictionary> : string
- string <string> of <preference> : string
- string <string> of <smbios structure> : string
- string of <osxvalue> : string
- string of <tuple item> : string
- string value <integer> of <wmi select> : string
- string value of <wmi select> : string
- string version of <application usage summary instance> : string
- subclass of <predefined\_device> : string
- subject common name of <x509 certificate> : string
- subject of <email task action> : string
- subject of <x509 certificate> : string
- subscription mode of <bes site> : string
- subscription of <event task trigger> : string
- subtype of <component> : string
- summary of <ips package> : string
- symbol of <binary operator> : string
- symbol of <unary operator> : string
- symptom of <apar> : string
- system language : string
- system\_configuration\_option <integer> of <dmi> : string
- system\_configuration\_option of <dmi> : string
- tag of <bes site> : string
- tag of <product> : string
- target name of <port mapping> : string

- targeted list of <bes action> : string
- targeted name of <bes action> : string
- targeting method of <bes action> : string
- targeting relevance of <bes action> : string
- task name of <application> : string
- text address of <kernel\_extension> : string
- text of <bes comment> : string
- time stamp of <ips fmri> : string
- time stamp of <ips package> : string
- time stamp of <ips partial matching fmri> : string
- time stamp of <ips version dependency> : string
- title of <grub bootable image> : string
- title of <product> : string
- title of <show message task action> : string
- to of <email task action> : string
- track fixlet of <evaluation cycle> : string
- trigger string of <scheduled task> : string
- tty of <logged on user> : string
- tty of <process> : string
- tty of <user> : string
- two digit hour of <time of day with time zone> : string
- two digit hour of <time of day> : string
- two digit minute of <time of day with time zone> : string
- two digit minute of <time of day> : string
- two digit second of <time of day with time zone> : string
- two digit second of <time of day> : string
- type of <Xinetd Service> : string
- type of <bes fixlet> : string
- type of <component> : string
- type of <debianpkg dependency> : string
- type of <distinguished name component> : string
- type of <drive> : string type of <execution> : string

- type of <filesystem> : string
- type of <ips version dependency> : string
- type of <json value> : string type of <license> : string
- type of <osxvalue> : string
- type of <predefined\_attribute> : string
- type of <predefined\_device> : string
- type of <processor> : string
- type of <scsidevice> : string
- type of <site> : string
- type of <smbios value> : string
- type of <smf property group> : string
- type of <smf property> : string
- type of <smf value> : string
- type of <sqlite column type> : string
- type of <volume> : string
- uid attribute of <bes ldap directory> : string
- unconfigure method of <predefined\_device> : string
- undefine method of <predefined\_device> : string
- unique id of <cloud provider> : string
- unique name of <package> : string
- unique type of <predefined\_attribute> : string
- unique type of <predefined\_device> : string
- upload progress of <client> : string
- uri of <task registration info> : string
- url of <bes server> : string
- url of <bes site> : string
- url of <bes wizard> : string
- url of <site> : string
- user comment of <local user> : string
- user comment of <user> : string
- user filter of <bes ldap directory> : string
- user id of <logon task trigger> : string

- user id of <session state change task trigger> : string
- user id of <task principal> : string
- user id of <user> : string
- user language : string
- user name of <filesystem object> : string
- user name of <symlink> : string
- user of <Xinetd Service> : string
- usual name of <property> : string
- uuid of <dmi system\_information> : string
- uuid of <filesystem> : string
- uuid of <ips authority info> : string
- value <string> of <file version block> : string
- value of <bes action parameter> : string
- value of <bes client setting> : string
- value of <bes deployment option> : string
- value of <bes property result> : string
- value of <bes unmanagedasset field> : string
- value of <bes wizard variable> : string
- value of <distinguished name component> : string
- value of <environment variable> : string
- value of <fixlet\_header> : string
- value of <ips setting pieces> : string
- value of <mime field> : string
- value of <network\_option> : string
- value of <plugin store key> : string
- value of <runlevel> : string
- value of <setting> : string
- value of <site profile variable> : string
- value of <symlink> : string
- value of <task named value pair> : string
- value of <user attribute> : string
- variable of <file> : string

- vendor name of <processor> : string
- vendor of <dmi bios\_information> : string
- vendor of <pkginfo> : string
- vendor of <product> : string
- vendor of <scsidevice> : string
- version info of <execution> : string
- version of <bios> : string
- version of <capability> : string
- version of <cloud provider> : string
- version of <cryptography> : string
- version of <debianpkg reverse dependencies> : string
- version of <dmi base\_board\_information> : string
- version of <dmi system\_enclosure\_or\_chassis> : string
- version of <dmi system\_information> : string
- version of <ips fmri> : string
- version of <ips package> : string
- version of <ips partial matching fmri> : string
- version of <ips repo> : string
- version of <ips version dependency> : string
- version of <palm application> : string
- version of <pkginfo> : string
- version of <processor> : string
- version of <rpc\_program> : string
- version of <task registration info> : string
- version string <string> of <module> : string
- version string of <bios> : string
- version string of <palm application> : string
- virtualizer of <application> : string
- vm control program of <processor> : string
- vm name of <processor> : string
- volume of <drive> : string
- volume of <filesystem> : string

- vpd flag of <predefined\_device> : string
- wake on lan subnet cidr string : string
- width of <predefined\_attribute> : string
- wizard link of <bes fixlet> : string
- wizard name of <bes fixlet> : string
- working directory of <exec task action> : string
- xml of <scheduled task> : string
- xml of <task definition> : string
- xml of <task registration info> : string
- xml of <task settings> : string
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- <action> as string : string
- <agent interface capability> as string : string
- <apar> as string : string
- <application> as string : string
- <bes action status> as string : string
- <bes fixlet field value> as string : string
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- <bit set> as string : string
- <boolean> as string : string
- <capability> as string : string
- <cast> as string : string
- <client process owner> as string : string
- <customized\_attribute> as string : string



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- <day of week> as three letters : string
- <day of year> as string : string
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- <debian package upstream version> as string : string
- <debian package version epoch> as string : string
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- <ips authority info> as string : string
- <ips branch version> as string : string
- <ips build version> as string : string
- <ips component version> as string : string
- <ips package> as string : string
- <ips setting pieces> as string : string
- <ips version dependency> as string : string
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- <ipv4or6 address> as string with ipv4 : string
- <ipv4or6 address> as string with ipv4 with zone index : string
- <ipv4or6 address> as string with leading zeros : string
- <ipv4or6 address> as string with leading zeros with zone index : string
- <ipv4or6 address> as string with zone index : string
- <ipv6 address> as compressed string : string
- <ipv6 address> as compressed string with ipv4 : string
- <ipv6 address> as compressed string with ipv4 with zone index : string

- <ipv6 address> as compressed string with zone index : string
- <ipv6 address> as string : string
- <ipv6 address> as string with ipv4 : string
- <ipv6 address> as string with ipv4 with zone index : string
- <ipv6 address> as string with leading zeros : string
- <ipv6 address> as string with leading zeros with zone index : string
- <ipv6 address> as string with zone index : string
- <json key> as string : string
- <json value> as string : string
- <kernel\_extension> as string : string
- <language> as string : string
- <local group member> as string : string
- <logical volume> as string : string
- <manual group> as string : string
- <metabase identifier> as string : string
- <metabase type> as string : string
- <metabase user type> as string : string
- <metabase value> as string : string
- <mode> as octal string : string
- <mode> as string : string
- <mode\_mask> as string : string
- <month and year> as string : string
- <month> as string : string
- <month> as three letters : string
- <month> as two digits : string
- <network\_option> as string : string
- <number of months> as string : string
- <operating system> as string : string
- <package> as string : string
- <palm application> as string : string
- <palm device> as string : string
- <pkginfo> as string : string

- <plugin store key> as string : string
- <plugin store object> as string : string
- <power level> as string : string
- <power state> as string : string
- <predefined\_attribute> as string : string
- <predefined\_device> as string : string
- <primary language> as string : string
- <product> as string : string
- <property> as string : string
- <rate> as string : string
- <registry key value type> as string : string
- <registry key value> as string : string
- <registry key> as string : string
- <rope> as string : string
- <rpc\_program> as string : string
- <rpm package release> as string : string
- <rpm package version record> as string : string
- <rpm package version> as string : string
- <runlevel> as string : string
- <security descriptor> as string : string
- <security identifier> as string : string
- <service pack> as string : string
- <service> as string : string
- <setting> as string : string
- <short rpm package version record> as string : string
- <site profile variable> as string : string
- <site version list> as string : string
- <smbios value> as hexadecimal : string
- <smbios value> as string : string
- <smf fmri> as string : string
- <smf instance> as string : string
- <smf property group> as string : string

- <smf property> as string : string
- <smf service> as string : string
- <smf snapshot> as string : string
- <smf time> as string : string
- <smf value> as string : string
- <sqlite column type> as string : string
- <sqlite column> as string : string
- <sqlite database> as string : string
- <sqlite row> as string : string
- <sqlite table> as string : string
- <stage> as string : string
- <substring> as string : string
- <symlink> as string : string
- <system access control list> as string : string
- <tcp state> as string : string
- <technology level> as string : string
- <time interval> as string : string
- <time of day with time zone> as string : string
- <time of day> as string : string
- <time range> as string : string
- <time zone> as string : string
- <time> as local string : string
- <time> as string : string
- <time> as universal string : string
- <tuple item> as string : string
- <type> as string : string
- <unary operator> as string : string
- <undefined> as string : string
- <user attribute> as string : string
- <uuid> as hexadecimal : string
- <uuid> as string : string
- <version with time> as string : string

- <version> as string : string
- <volume group> as string : string
- <winrt enumeration> as string : string
- <winrt package user information> as string : string
- <winrt package> as string : string
- <wmi object> as string : string
- <wmi select> as string : string
- <xml dom node> as text : string
- <xml dom node> as xml : string
- <year> as string : string
- <zone network interface> as string : string
- <zone> as string : string

## Properties

- abbr <string> of <string> : html
- abbr of <string> : html
- account with privilege <string> : security
- account acronym <string> of <string> : html
- acronym of <string> : html
- active device file <string> : file
- address <string> of <string> : html
- address of <string> : html
- anchor <string> of <string> : html
- anchor of <string> : html
- application <string> : application
- application <string> : filesystem object
- application usage <string> : timed( time range, integer )
- application usage summary <string> : application usage summary
- b <string> of <string> : html
- b of <string> : html
- base <string> of <string> : html
- base of <string> : html

- base64 decode <string> : string
- base64 encode <string> : string
- bes deployment option <string> : bes deployment option
- bes domain <string> : bes domain
- bes property <string> : bes property
- big <string> of <string> : html
- big of <string> : html
- binary operator <string> : binary operator
- binary\_string <string> : binary\_string
- bit set <string> : bit set
- blockquote <string> of <string> : html
- blockquote of <string> : html
- body <string> of <string> : html
- body of <string> : html
- boolean <string> : boolean
- br <string> : html
- bundle <string> : bundle
- capability <string> : capability
- caption <string> of <string> : html
- caption of <string> : html
- case insensitive regex <string> : regular expression
- case insensitive regular expression <string> : regular expression
- cast <string> : cast
- catalog <string> : message\_catalog
- character <integer> of <string> : substring
- character of <string> : substring
- cite <string> of <string> : html
- cite of <string> : html
- code <string> of <string> : html
- code of <string> : html
- col <string> of <string> : html
- col of <string> : html

- colgroup <string> of <string> : html
- colgroup of <string> : html
- concatenation <html> of <string> : html
- concatenation <string> of <string> : string
- concatenation of <string> : string
- control panel <string> : enableable\_file
- country <string> : country
- custom site subscription effective date <string> : time
- date <string> : date
- day\_of\_month <string> : day of month
- day\_of\_week <string> : day of week
- dd <string> of <string> : html
- dd of <string> : html
- debian package version <string> : debian package version
- debian package version epoch <string> : debian package version epoch
- debian package version revision <string> : debian package version revision
- debian package version upstream <string> : debian package upstream version
- definition list <string> of <string> : html
- definition list of <string> : html
- del <string> of <string> : html
- del of <string> : html
- device file <string> : device
- file dfn <string> of <string> : html
- dfn of <string> : html
- disabled control panel <string> : enableable\_file
- disabled extension <string> : enableable\_file
- disabled shutdown item <string> : enableable\_file
- disabled startup item <string> : enableable\_file
- distinguished name <string> : distinguished name
- div <string> of <string> : html
- div of <string> : html
- domain user <string> : local user



- domain user <string> : user
- download file <string> : file
- download path <string> : string
- drive <string> : drive
- drive <string> : filesystem
- drive <string> : volume dt <string> of <string> : html
- dt of <string> : html
- em <string> of <string> : html
- em of <string> : html
- enabled control panel <string> : enableable\_file
- enabled extension <string> : enableable\_file
- enabled shutdown item <string> : enableable\_file
- enabled startup item <string> : enableable\_file
- encoding <string> : encoding
- error <string> : undefined
- escape of <string> : string
- event log <string> : event log
- execution <string> : execution
- expand environment string of <string> : string
- expand x32 environment string of <string> : string
- expand x64 environment string of <string> : string
- extension <string> : enableable\_file
- fifo file <string> : fifo file
- file <string> : file
- file signature <string> : file signature
- file type <string> : file type
- fileset version record <string> : fileset version record
- fileset version requirement <string> : fileset version requirement
- filesystem <string> : filesystem
- filesystem <string> : volume
- first <integer> of <string> : substring
- first <string> of <string> : substring

- first match <regular expression> of <string> : regular expression match
- floating point <string> : floating point
- folder <string> : folder
- format <string> : format
- framework <string> : folder
- full wmi <string> : wmi
- fxf encoding concatenation <string> of <string> : string
- fxf encoding concatenation of <string> : string
- gestalt <string> : integer
- grub config file <string> : grub config file
- h1 <string> of <string> : html
- h1 of <string> : html
- h2 <string> of <string> : html
- h2 of <string> : html
- h3 <string> of <string> : html
- h3 of <string> : html
- h4 <string> of <string> : html
- h4 of <string> : html
- h5 <string> of <string> : html
- h5 of <string> : html
- h6 <string> of <string> : html
- h6 of <string> : html
- head <string> of <string> : html
- head of <string> : html
- hexadecimal integer <string> : integer
- hexadecimal string <string> : string
- hfs file <string> : file
- hfs folder <string> : folder
- hfs item <string> : filesystem object
- hr <string> : html
- html <string> : html
- html <string> of <string> : html

- html of <string> : html
- html tag <( string, html )> : html
- html tag <( string, html attribute list )> : html
- html tag <( string, html attribute list, html )> : html
- html tag <( string, html attribute list, string )> : html
- html tag <( string, string )> : html
- html tag <string> of <string> : html
- ins <string> of <string> : html
- ins of <string> : html
- integer <string> : integer
- ips repo <string> : ips repo
- ipv4 address <string> : ipv4 address
- ipv4or6 address <string> : ipv4or6 address
- ipv6 address <string> : ipv6 address
- italic <string> of <string> : html
- italic of <string> : html
- item <string> : filesystem object
- javascript array <string> of <string> : html
- json of <string> : json value
- kbd <string> of <string> : html
- kbd of <string> : html
- last <integer> of <string> : substring
- last <string> of <string> : substring
- length of <string> : integer
- li <string> of <string> : html
- li of <string> : html
- link <string> of <string> : html
- link of <string> : html
- local encoding concatenation <string> of <string> : string
- local encoding concatenation of <string> : string
- local group <string> : local group
- local mssql database <string> : local mssql database

- local time <string> : time
- local user <string> : local user
- local user <string> : user
- match <regular expression> of <string> : regular expression match
- md5 of <string> : string
- meta <string> of <string> : html
- meta of <string> : html
- module <string> : module
- month <string> : month
- native application <string> : application
- native file <string> : file
- native folder <string> : folder
- network option <string> : network\_option
- network share <string> : network share
- numeric value of <string> : integer
- ol <string> of <string> : html
- ol of <string> : html
- ordered list <string> of <string> : html
- ordered list of <string> : html
- p <string> of <string> : html
- p of <string> : html
- palm device <string> : palm device
- parameter <string> : string
- pending restart <string> : boolean
- percent decode <string> : string
- percent encode <string> : string
- plugin store <string> : plugin store object
- position <integer> of <string> : string position
- position of <string> : string position
- posix file <string> : file
- posix folder <string> : folder
- posix item <string> : filesystem object

- pre <string> of <string> : html
- pre of <string> : html
- preference <string> : preference
- private variable <( string, string )> : string
- process <string> : process
- property <string> : property
- q <string> of <string> : html
- q of <string> : html
- recent application <string> : application
- regapp <string> : application
- regex <string> : regular expression
- regex escape of <string> : string
- regular expression <string> : regular expression
- rope <string> : rope
- rpm <string> : rpmdatabase
- rpm package release <string> : rpm package release
- rpm package version <string> : rpm package version
- rpm package version record <string> : rpm package version
- record running application <string> : application running
- service <string> : service
- samp <string> of <string> : html
- samp of <string> : html
- scheduled task <string> : scheduled task
- security account <string> : security account
- security descriptor <string> : security descriptor
- selinux boolean <string> : SELinux Boolean
- service <string> : dummy
- service <string> : service
- set of <string> : string
- set sha1 of <string> : string
- sha224 of <string> : string
- sha256 of <string> : string

- sha2\_224 of <string> : string
- sha2\_256 of <string> : string
- sha2\_384 of <string> : string
- sha2\_512 of <string> : string
- sha384 of <string> : string
- sha512 of <string> : string
- shared variable <( string, string )> : string
- shutdown item <string> : enableable\_file
- sid <string> : security identifier
- site <string> : site
- site version list <string> : site version list
- small <string> of <string> : html
- small of <string> : html
- socket file <string> : socket file
- span <string> of <string> : html
- span of <string> : html
- stage <string> : stage
- startup item <string> : enableable\_file
- string <string> : string
- strong <string> of <string> : html
- strong of <string> : html
- strverscmp version <string> : strverscmp version
- sub <string> of <string> : html
- sub of <string> : html
- substring <( integer, integer )> of <string> : substring
- substring <string> of <string> : substring
- substring after <string> of <string> : substring
- substring before <string> of <string> : substring
- substring between <string> of <string> : substring
- substring separated by <string> of <string> : substring
- sup <string> of <string> : html
- sup of <string> : html

- symlink <string> : symlink
- system file <string> : file
- system ini device file <string> : file
- system x32 file <string> : file
- system x64 file <string> : file
- table <string> of <string> : html
- table of <string> : html
- task folder <string> : task folder
- tbody <string> of <string> : html
- tbody of <string> : html
- td <string> of <string> : html
- td of <string> : html
- tfoot <string> of <string> : html
- tfoot of <string> : html
- th <string> of <string> : html
- th of <string> : html
- thead <string> of <string> : html
- thead of <string> : html
- time <string> : time
- time interval <string> : time interval
- time zone <string> : time zone
- time\_of\_day <string> : time of day
- title <string> of <string> : html
- title of <string> : html
- tr <string> of <string> : html
- tr of <string> : html
- tt <string> of <string> : html
- tt of <string> : html
- tuple item of <string> : tuple item
- tuple string item <integer> of <string> : string
- tuple string item of <string> : string
- tuple string of <string> : string

- type <string> : type
- ul <string> of <string> : html
- ul of <string> : html
- unary operator <string> : unary operator
- unique value of <string> : string with multiplicity
- universal time <string> : time
- unordered list <string> of <string> : html
- unordered list of <string> : html
- user <string> : user
- uuid <string> : uuid
- var <string> of <string> : html
- var of <string> : html
- version <string> : version
- volume <string> : volume
- windows display time <string> : time
- windows file <string> : file
- winrt package <string> : winrt package
- wmi <string> : wmi
- x32 application <string> : application
- x32 file <string> : file
- x32 folder <string> : folder
- x64 application <string> : application
- x64 file <string> : file
- x64 folder <string> : folder
- xinetd service <string> : Xinetd Service
- xml document of <string> : xml dom document
- year <string> : year
- zone <string> : zone
- zoned time\_of\_day <string> : time of day with time zone

#### Casts:

- <string> as binary\_string : binary\_string



- <string> as boolean : boolean
- <string> as date : date
- <string> as day\_of\_month : day of month
- <string> as day\_of\_week : day of week
- <string> as floating point : floating point
- <string> as fxf binary\_string : binary\_string
- <string> as hexadecimal : string
- <string> as html : html
- <string> as integer : integer
- <string> as ipv4or6 address : ipv4or6 address
- <string> as ipv6 address : ipv6 address
- <string> as left trimmed string : string
- <string> as local binary\_string : binary\_string
- <string> as local time : time
- <string> as local zoned time\_of\_day : time of day with time zone
- <string> as lowercase : string
- <string> as month : month
- <string> as right trimmed string : string
- <string> as site version list : site version list
- <string> as string : string
- <string> as strverscmp version : strverscmp version
- <string> as time : time
- <string> as time interval : time interval
- <string> as time zone : time zone
- <string> as time\_of\_day : time of day
- <string> as trimmed string : string
- <string> as universal time : time
- <string> as universal zoned time\_of\_day : time of day with time zone
- <string> as uppercase : string
- <string> as utf16 binary\_string : binary\_string
- <string> as utf8 binary\_string : binary\_string
- <string> as version : version

- <string> as windows display time : time
- <string> as year : year
- <string> as zoned time\_of\_day : time of day with time zone

## Operators

- <debian package upstream version> < <string> : boolean
- <debian package upstream version> <= <string> : boolean
- <debian package upstream version> = <string> : boolean
- <debian package version epoch> < <string> : boolean
- <debian package version epoch> <= <string> : boolean
- <debian package version epoch> = <string> : boolean
- <debian package version revision> < <string> : boolean
- <debian package version revision> <= <string> : boolean
- <debian package version revision> = <string> : boolean
- <debian package version> < <string> : boolean
- <debian package version> <= <string> : boolean
- <debian package version> = <string> : boolean
- <file content> contains <string> : boolean
- <fileset version record> < <string> : boolean
- <fileset version record> <= <string> : boolean
- <fileset version record> = <string> : boolean
- <format> + <string> : format
- <html> & <string> : html
- <ips branch version> < <string> : boolean
- <ips branch version> <= <string> : boolean
- <ips branch version> = <string> : boolean
- <ips build version> < <string> : boolean
- <ips build version> <= <string> : boolean
- <ips build version> = <string> : boolean
- <ips component version> < <string> : boolean
- <ips component version> <= <string> : boolean
- <ips component version> = <string> : boolean

- <ips fmri> < <string> : boolean
- <ips fmri> <= <string> : boolean
- <ips fmri> = <string> : boolean
- <ips partial matching fmri> < <string> : boolean
- <ips partial matching fmri> <= <string> : boolean
- <ips partial matching fmri> = <string> : boolean
- <ipv4 address> < <string> : boolean
- <ipv4 address> <= <string> : boolean
- <ipv4 address> = <string> : boolean
- <ipv4or6 address> < <string> : boolean
- <ipv4or6 address> <= <string> : boolean
- <ipv4or6 address> = <string> : boolean
- <registry key value type> < <string> : boolean
- <registry key value type> <= <string> : boolean
- <registry key value type> = <string> : boolean
- <registry key value> < <string> : boolean
- <registry key value> <= <string> : boolean
- <registry key value> = <string> : boolean
- <regular expression> = <string> : boolean
- <rope> & <string> : rope
- <rope> contains <string> : boolean
- <rpm package release> < <string> : boolean
- <rpm package release> <= <string> : boolean
- <rpm package release> = <string> : boolean
- <rpm package version record> < <string> : boolean
- <rpm package version record> <= <string> : boolean
- <rpm package version record> = <string> : boolean
- <rpm package version> < <string> : boolean
- <rpm package version> <= <string> : boolean
- <rpm package version> = <string> : boolean
- <service pack> < <string> : boolean
- <service pack> <= <string> : boolean

- <service pack> = <string> : boolean
- <string set> contains <string> : boolean
- <string> & <html> : html
- <string> & <rope> : rope
- <string> & <string> : string
- <string> < <debian package upstream version> : boolean
- <string> < <debian package version epoch> : boolean
- <string> < <debian package version revision> : boolean
- <string> < <debian package version> : boolean
- <string> < <fileset version record> : boolean
- <string> < <ips branch version> : boolean
- <string> < <ips build version> : boolean
- <string> < <ips component version> : boolean
- <string> < <ips fmri> : boolean
- <string> < <ips partial matching fmri> : boolean
- <string> < <ipv4 address> : boolean
- <string> < <ipv4or6 address> : boolean
- <string> < <registry key value type> : boolean
- <string> < <registry key value> : boolean
- <string> < <rpm package release> : boolean
- <string> < <rpm package version record> : boolean
- <string> < <rpm package version> : boolean
- <string> < <service pack> : boolean
- <string> < <string> : boolean
- <string> < <strverscmp version> : boolean
- <string> < <technology level> : boolean
- <string> < <uuid> : boolean
- <string> < <version with time> : boolean
- <string> < <version> : boolean
- <string> <= <debian package upstream version> : boolean
- <string> <= <debian package version epoch> : boolean
- <string> <= <debian package version revision> : boolean

- <string> <= <debian package version> : boolean
- <string> <= <fileset version record> : boolean
- <string> <= <ips branch version> : boolean
- <string> <= <ips build version> : boolean
- <string> <= <ips component version> : boolean
- <string> <= <ips fmri> : boolean
- <string> <= <ips partial matching fmri> : boolean
- <string> <= <ipv4 address> : boolean
- <string> <= <ipv4or6 address> : boolean
- <string> <= <registry key value type> : boolean
- <string> <= <registry key value> : boolean
- <string> <= <rpm package release> : boolean
- <string> <= <rpm package version record> : boolean
- <string> <= <rpm package version> : boolean
- <string> <= <service pack> : boolean
- <string> <= <string> : boolean
- <string> <= <strverscmp version> : boolean
- <string> <= <technology level> : boolean
- <string> <= <uuid> : boolean
- <string> <= <version with time> : boolean
- <string> <= <version> : boolean
- <string> = <debian package upstream version> : boolean
- <string> = <debian package version epoch> : boolean
- <string> = <debian package version revision> : boolean
- <string> = <debian package version> : boolean
- <string> = <fileset version record> : boolean
- <string> = <ips branch version> : boolean
- <string> = <ips build version> : boolean
- <string> = <ips component version> : boolean
- <string> = <ips fmri> : boolean
- <string> = <ips partial matching fmri> : boolean
- <string> = <ipv4 address> : boolean

- <string> = <ipv4or6 address> : boolean
- <string> = <registry key value type> : boolean
- <string> = <registry key value> : boolean
- <string> = <regular expression> : boolean
- <string> = <rpm package release> : boolean
- <string> = <rpm package version record> : boolean
- <string> = <rpm package version> : boolean
- <string> = <service pack> : boolean
- <string> = <string> : boolean
- <string> = <strverscmp version> : boolean
- <string> = <technology level> : boolean
- <string> = <uuid> : boolean
- <string> = <version with time> : boolean
- <string> = <version> : boolean
- <string> contains <regular expression> : boolean
- <string> contains <string> : boolean
- <string> ends with <regular expression> : boolean
- <string> ends with <string> : boolean
- <string> starts with <regular expression> : boolean
- <string> starts with <string> : boolean
- <strverscmp version> < <string> : boolean
- <strverscmp version> <= <string> : boolean
- <strverscmp version> = <string> : boolean
- <technology level> < <string> : boolean
- <technology level> <= <string> : boolean
- <technology level> = <string> : boolean
- <uuid> < <string> : boolean
- <uuid> <= <string> : boolean
- <uuid> = <string> : boolean
- <version with time> < <string> : boolean
- <version with time> <= <string> : boolean
- <version with time> = <string> : boolean

- `<version> < <string>` : boolean
- `<version> <= <string>` : boolean
- `<version> = <string>` : boolean

## string position

String position works in combination with the string and substring data types. A string position is a point within a string. It can be compared to an integer (which it is derived from), but it also acts as a pointer within a string so that the preceding and following text can be extracted.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130 Raspbian

Creation:

- end of `<substring>` : string position
- position `<integer>` of `<string>` : string position
- position of `<string>` : string position
- start of `<substring>` : string position

Properties:

- following text of `<string position>` : substring
- preceding text of `<string position>` : substring

## string set

The `<string set>` inspectors deal with sets of strings, which are essentially lists or arrays with string elements. Think of them as mathematical sets: you can compare them, subtract them from other sets and form the union and intersection of multiple sets. Note: These inspectors are not available on SUSE Linux systems.

## Version

## Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- set of <string> : string set

Properties:

- element of <string set> : string
- intersection of <string set> : string set
- size of <string set> : integer
- union of <string set> : string set

Operators:

- <string set> \* <string set> : string set
- <string set> + <string set> : string set
- <string set> - <string set> : string set
- <string set> = <string set> : boolean
- <string set> contains <string set> : boolean
- <string set> contains <string> : boolean

## string with multiplicity

The <string with multiplicity> inspectors deal with arrays of strings, allowing you to extract unique strings and count them.

## Version

## Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:



- unique value of <string> : string with multiplicity

Properties:

- multiplicity of <string with multiplicity> : integer

## substring

A substring object is a part of a larger string and has all the properties of a string, as well as extra methods and properties.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- character <integer> of <string> : substring
- character of <string> : substring
- first <integer> of <string> : substring
- first <string> of <string> : substring
- following text of <string position> : substring
- last <integer> of <string> : substring
- last <string> of <string> : substring
- parenthesized part <integer> of <regular expression match> : substring
- parenthesized part of <regular expression match> : substring
- preceding text of <string position> : substring
- substring <( integer, integer )> of <string> : substring
- substring <string> of <string> : substring
- substring after <string> of <string> : substring
- substring before <string> of <string> : substring
- substring between <string> of <string> : substring
- substring separated by <string> of <string> : substring

**Properties:**

- end of <substring> : string position
- following text of <substring> : substring
- preceding text of <substring> : substring
- start of <substring> : string position

**Casts:**

- <substring> as string : string
- <substring> as substring : substring

**binary\_string**

Creates a binary string from the hexadecimal notation. The string must contain only the characters 0-9 and a-f. For example:

```
Q: binary_string "82a4"
```

returns binary string of 2 bytes, the first byte contains 0x82, second byte contains 0xa4.

**Version****Platforms**

9.5.3.211 AIX, Debian, Mac, Red Hat, SUSE, Session, Solaris, Ubuntu, Windows

9.5.13.130Raspbian

**Creation:**

- binary location of <filesystem object> : binary\_string
- binary name of <filesystem object> : binary\_string
- binary pathname of <filesystem object> : binary\_string
- binary\_string <string> : binary\_string
- byte <integer> : binary\_string
- data <string> of <dictionary> : binary\_string
- data of <osxvalue> : binary\_string
- reserved of <dmi bios\_language\_information> : binary\_string
- reserved of <dmi system\_boot\_information> : binary\_string

- uuid of <dmi system\_information> : binary\_string
- <string> as binary\_string : binary\_string
- <string> as fxf binary\_string : binary\_string
- <string> as local binary\_string : binary\_string
- <string> as utf16 binary\_string : binary\_string
- <string> as utf8 binary\_string : binary\_string
- <symlink> as binary\_string : binary\_string
- <uuid> as binary\_string : binary\_string

#### Properties:

- application <binary\_string> : application
- binary\_substring <( integer, integer )> of <binary\_string> : binary\_substring
- binary\_substring <binary\_string> of <binary\_string> : binary\_substring
- byte <integer> of <binary\_string> : binary\_substring
- byte of <binary\_string> : binary\_substring
- file <binary\_string> : file
- first <integer> of <binary\_string> : binary\_substring
- folder <binary\_string> : folder
- last <integer> of <binary\_string> : binary\_substring
- length of <binary\_string> : integer
- percent encode <binary\_string> : string
- position <integer> of <binary\_string> : binary
- position position of <binary\_string> : binary
- position representable in <string> of <binary\_string> : boolean
- representable in utf16 of <binary\_string> : boolean
- representable in utf8 of <binary\_string> : boolean
- representable of <binary\_string> : boolean
- representation in <string> of <binary\_string> : string
- symlink <binary\_string> : symlink
- uuid <binary\_string> : uuid

#### Casts:

- <binary\_string> as fxf string : string
- <binary\_string> as hexadecimal : string
- <binary\_string> as local string : string
- <binary\_string> as string : string
- <binary\_string> as utf16 string : string
- <binary\_string> as utf8 string : string

#### Operators:

- <binary\_string> & <binary\_string> : binary\_string
- <binary\_string> < <binary\_string> : boolean
- <binary\_string> <= <binary\_string> : boolean
- <binary\_string> = <binary\_string> : boolean
- <binary\_string> contains <binary\_string> : boolean
- <binary\_string> ends with <binary\_string> : boolean
- <binary\_string> starts with <binary\_string> : boolean

## binary\_substring

No documentation exists.

### Version

### Platforms

9.5.5.193 AIX, Debian, Mac, Red Hat, SUSE, Session, Solaris, Ubuntu, Windows

9.5.13.130Raspbian

Creation:

- binary\_substring <( integer, integer )> of <binary\_string> : binary\_substring
- binary\_substring <binary\_string> of <binary\_string> : binary\_substring
- byte <integer> of <binary\_string> : binary\_substring
- byte of <binary\_string> : binary\_substring
- first <integer> of <binary\_string> : binary\_substring
- following binary\_string of <binary position> : binary\_substring
- last <integer> of <binary\_string> : binary\_substring

- preceding binary\_string of <binary position> : binary\_substring

#### Properties:

- end of <binary\_substring> : binary position
- following binary\_string of <binary\_substring> : binary\_substring
- preceding binary\_string of <binary\_substring> : binary\_substring
- start of <binary\_substring> : binary position

#### Casts:

- <binary\_substring> as binary\_substring : binary\_substring
- <binary\_substring> as string : string

## binary position

No documentation exists.

### Version

### Platforms

9.5.5.193 AIX, Debian, Mac, Red Hat, SUSE, Session, Solaris, Ubuntu, Windows

9.5.13.130Raspbian

#### Creation:

- end of <binary\_substring> : binary position
- position <integer> of <binary\_string> : binary position
- position of <binary\_string> : binary position
- start of <binary\_substring> : binary position

#### Properties:

- following binary\_string of <binary position> : binary\_substring
- preceding binary\_string of <binary position> : binary\_substring

## undefined

The "undefined" type is used as the result type of inspectors that never return a value.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130 Raspbian

Creation:

- error <string> : undefined
- nil : undefined
- null : undefined

Casts:

- <undefined> as string : string

## utf8 string

No documentation exists.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

Creation:

- <bes action set> as xml : utf8 string
- <bes action> as xml : utf8 string
- <bes computer group set> as xml : utf8 string
- <bes computer group> as xml : utf8 string
- <bes fixlet set> as xml : utf8 string
- <bes fixlet> as xml : utf8 string
- <bes property set> as xml : utf8 string

- <bes property> as xml : utf8 string

## html

This type helps you to author HTML commands to create customized content for the BigFix Console and Web Reports. They allow construction of HTML snippets that can be used to display BigFix data elements in a browser.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- abbr <string> of <string> : html
- abbr of <string> : html
- acronym <string> of <string> : html
- acronym of <string> : html
- address <string> of <string> : html
- address of <string> : html
- anchor <string> of <string> : html
- anchor of <string> : html
- b <string> of <string> : html
- b of <string> : html
- base <string> of <string> : html
- base of <string> : html
- big <string> of <string> : html
- big of <string> : html
- blockquote <string> of <string> : html
- blockquote of <string> : html
- body <string> of <string> : html
- body of <bes fixlet> : html
- body of <string> : html br : html

- br <string> : html
- caption <string> of <string> : html
- caption of <string> : html
- cite <string> of <string> : html
- cite of <string> : html
- code <string> of <string> : html
- code of <string> : html
- col <string> of <string> : html
- col of <string> : html
- colgroup <string> of <string> : html
- colgroup of <string> : html
- concatenation <html> of <string> : html
- dd <string> of <string> : html
- dd of <string> : html
- definition list <string> of <string> : html
- definition list of <string> : html
- del <string> of <string> : html
- del of <string> : html
- dfn <string> of <string> : html
- dfn of <string> : html
- display message of <bes fixlet> : html
- div <string> of <string> : html
- div of <string> : html
- dt <string> of <string> : html
- dt of <string> : html
- em <string> of <string> : html
- em of <string> : html
- h1 <string> of <string> : html
- h1 of <string> : html
- h2 <string> of <string> : html
- h2 of <string> : html
- h3 <string> of <string> : html



- h3 of <string> : html
- h4 <string> of <string> : html
- h4 of <string> : html
- h5 <string> of <string> : html
- h5 of <string> : html
- h6 <string> of <string> : html
- h6 of <string> : html
- head <string> of <string> : html
- head of <string> : html
- hr : html
- hr <string> : html
- html <string> : html
- html <string> of <string> : html
- html of <string> : html
- html tag <( string, string )> : html
- html tag <string> of <string> : html
- ins <string> of <string> : html
- ins of <string> : html
- italic <string> of <string> : html
- italic of <string> : html
- javascript array <string> of <boolean> : html
- javascript array <string> of <integer> : html
- javascript array <string> of <statistical bin> : html
- javascript array <string> of <string> : html
- kbd <string> of <string> : html
- kbd of <string> : html
- li <string> of <string> : html
- li of <string> : html
- link <html> of <bes action> : html
- link <html> of <bes computer> : html
- link <html> of <bes domain> : html
- link <html> of <bes fixlet> : html

- link <html> of <bes unmanagedasset> : html
- link <html> of <bes user> : html
- link <html> of <bes wizard> : html
- link <string> of <bes action> : html
- link <string> of <bes computer> : html
- link <string> of <bes domain> : html
- link <string> of <bes fixlet> : html
- link <string> of <bes unmanagedasset> : html
- link <string> of <bes user> : html
- link <string> of <bes wizard> : html
- link <string> of <string> : html
- link of <bes action> : html
- link of <bes computer> : html
- link of <bes domain> : html
- link of <bes fixlet> : html
- link of <bes unmanagedasset> : html
- link of <bes user> : html
- link of <bes wizard> : html
- link of <string> : html
- message of <bes fixlet> : html
- meta <string> of <string> : html
- meta of <string> : html
- offer description html of <bes action> : html
- ol <string> of <string> : html
- ol of <string> : html
- ordered list <string> of <string> : html
- ordered list of <string> : html
- p <string> of <string> : html
- p of <string> : html
- pre <string> of <string> : html
- pre of <string> : html
- q <string> of <string> : html

- q of <string> : html
- samp <string> of <string> : html
- samp of <string> : html
- small <string> of <string> : html
- small of <string> : html
- span <string> of <string> : html
- span of <string> : html
- strong <string> of <string> : html
- strong of <string> : html
- sub <string> of <string> : html
- sub of <string> : html
- sup <string> of <string> : html
- sup of <string> : html
- table <string> of <string> : html
- table of <string> : html
- tbody <string> of <string> : html
- tbody of <string> : html
- td <string> of <string> : html
- td of <string> : html
- tfoot <string> of <string> : html
- tfoot of <string> : html
- th <string> of <string> : html
- th of <string> : html
- thead <string> of <string> : html
- thead of <string> : html
- title <string> of <string> : html
- title of <string> : html
- tr <string> of <string> : html
- tr of <string> : html
- tt <string> of <string> : html
- tt of <string> : html
- ul <string> of <string> : html

- ul of <string> : html
- unordered list <string> of <string> : html
- unordered list of <string> : html
- var <string> of <string> : html
- var of <string> : html
- wizard data of <bes fixlet> : html
- <string> as html : html

#### Properties:

- abbr <string> of <html> : html
- abbr of <html> : html
- acronym <string> of <html> : html
- acronym of <html> : html
- address <string> of <html> : html
- address of <html> : html
- anchor <string> of <html> : html
- anchor of <html> : html
- b <string> of <html> : html
- b of <html> : html
- base <string> of <html> : html
- base of <html> : html
- big <string> of <html> : html
- big of <html> : html
- blockquote <string> of <html> : html
- blockquote of <html> : html
- body <string> of <html> : html
- body of <html> : html
- caption <string> of <html> : html
- caption of <html> : html
- cite <string> of <html> : html
- cite of <html> : html
- code <string> of <html> : html

- code of <html> : html
- col <string> of <html> : html
- col of <html> : html
- colgroup <string> of <html> : html
- colgroup of <html> : html
- concatenation <html> of <html> : html
- concatenation <string> of <html> : html
- concatenation of <html> : html
- dd <string> of <html> : html
- dd of <html> : html
- definition list <string> of <html> : html
- definition list of <html> : html
- del <string> of <html> : html
- del of <html> : html
- dfn <string> of <html> : html
- dfn of <html> : html
- div <string> of <html> : html
- div of <html> : html
- dt <string> of <html> : html
- dt of <html> : html
- em <string> of <html> : html
- em of <html> : html
- h1 <string> of <html> : html
- h1 of <html> : html
- h2 <string> of <html> : html
- h2 of <html> : html
- h3 <string> of <html> : html
- h3 of <html> : html
- h4 <string> of <html> : html
- h4 of <html> : html
- h5 <string> of <html> : html
- h5 of <html> : html

- h6 <string> of <html> : html
- h6 of <html> : html
- head <string> of <html> : html
- head of <html> : html
- html <string> of <html> : html
- html concatenation <string> of <html> : html
- html concatenation of <html> : html
- html of <html> : html
- html tag <( string, html )> : html
- html tag <( string, html attribute list, html )> : html
- html tag <string> of <html> : html
- ins <string> of <html> : html
- ins of <html> : html
- italic <string> of <html> : html
- italic of <html> : html
- kbd <string> of <html> : html
- kbd of <html> : html
- li <string> of <html> : html
- li of <html> : html
- link <string> of <html> : html
- link of <html> : html
- meta <string> of <html> : html
- meta of <html> : html
- ol <string> of <html> : html
- ol of <html> : html
- ordered list <string> of <html> : html
- ordered list of <html> : html
- p <string> of <html> : html
- p of <html> : html
- pre <string> of <html> : html
- pre of <html> : html
- q <string> of <html> : html

- q of <html> : html
- samp <string> of <html> : html
- samp of <html> : html
- small <string> of <html> : html
- small of <html> : html
- span <string> of <html> : html
- span of <html> : html
- strong <string> of <html> : html
- strong of <html> : html
- sub <string> of <html> : html
- sub of <html> : html
- sup <string> of <html> : html
- sup of <html> : html
- table <string> of <html> : html
- table of <html> : html
- tbody <string> of <html> : html
- tbody of <html> : html
- td <string> of <html> : html
- td of <html> : html
- tfoot <string> of <html> : html
- tfoot of <html> : html
- th <string> of <html> : html
- th of <html> : html
- thead <string> of <html> : html
- thead of <html> : html
- title <string> of <html> : html
- title of <html> : html
- tr <string> of <html> : html
- tr of <html> : html
- tt <string> of <html> : html
- tt of <html> : html
- ul <string> of <html> : html

- ul of `<html>` : `html`
- unordered list `<string>` of `<html>` : `html`
- unordered list of `<html>` : `html`
- var `<string>` of `<html>` : `html`
- var of `<html>` : `html`

#### Casts:

- `<html>` as decoded string : `string`
- `<html>` as `html` : `html`
- `<html>` as `string` : `string`

#### Operators:

- `<html>` & `<html>` : `html`
- `<html>` & `<string>` : `html`
- `<string>` & `<html>` : `html`

## html attribute list

This object type helps you to author HTML commands to create customized content for the BigFix Console and the Web Reports. Its scope is to create an HTML *attribute=value* snippet such as `href="site.com"`. The keyword to specify is `attr list` and the format accepted by `attr list` is a tuple. For example:

```
Q: html tag ("prova", attr list of ("attr", "value"))
A: <prova attr="value"/>
```

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

#### Properties:

- `html tag` `<( string, html attribute list )>` : `html`



- html tag <( string, html attribute list, html )> : html
- html tag <( string, html attribute list, string )> : html

## tuple item

No documentation exists.

### Version

### Platforms

9.5.3.211 AIX, Debian, Mac, Red Hat, SUSE, Session, Solaris, Ubuntu, Windows

9.5.13.130Raspbian

Creation:

- tuple item of <string> : tuple item

Properties:

- index of <tuple item> : integer
- string of <tuple item> : string

Casts:

- <tuple item> as string : string

## encoding

Specifies an encoding to use when reading a file in a relevance expression. The `encoding` could be any name that the [International Components for Unicode \(ICU\)](#) can recognize, such as "ISO-8859-1", "Shift\_JIS", and "UTF-8". Once created, the `file` objects can be used as regular `file` objects and you can apply any operation applicable to text files. If no encoding is specified, the files are read in the local encoding.

These are some examples:

```
Q: (content of file "c:\aaa\bbb.txt" of encoding "Shift_JIS") contains "##"
```

returns if the word "うみ" is found in the file "c:\aaa\bbb.txt" that is written in Shift\_JIS.

```
Q: line 3 of file "eee.txt" of folder "/ccc/ddd" of encoding "Windows-1252"
```

returns the third line of the file "/ccc/ddd/eee.log" in Windows-1252.

```
Q: key "##" of section "###" of file "f:\ggg\hhh.ini" of encoding "UTF-8"
```

returns the value of the "やま" key in the "其之式" section of the file "f:\ggg\hhh.ini" that is written in UTF-8.

### Version

### Platforms

9.5.5.193 AIX, Debian, Mac, Red Hat, SUSE, Solaris, Ubuntu, Windows

9.5.13.130Raspbian

Creation:

- encoding <string> : encoding

Properties:

- download file <string> of <encoding> : file
- download folder of <encoding> : folder
- file <binary\_string> of <encoding> : file
- file <string> of <encoding> : file
- folder <binary\_string> of <encoding> : folder
- folder <string> of <encoding> : folder
- hfs file <string> of <encoding> : file
- hfs folder <string> of <encoding> : folder
- native file <string> of <encoding> : file
- native folder <string> of <encoding> : folder
- posix file <string> of <encoding> : file
- posix folder <string> of <encoding> : folder
- symlink <binary\_string> of <encoding> : symlink s
- ymlink <string> of <encoding> : symlink
- x32 file <string> of <encoding> : file
- x32 folder <string> of <encoding> : folder
- x64 file <string> of <encoding> : file

- x64 folder <string> of <encoding> : folder

## Date and Time

### date

The date objects are the various inspectors that access the date types.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- april <integer> of <integer> : date
- august <integer> of <integer> : date
- current date : date
- date <string> : date
- date <time zone> of <time> : date
- date range end of <bes action> : date
- date range start of <bes action> : date
- december <integer> of <integer> : date
- end date of <bes action> : date
- expiration date of <bes product> : date
- february <integer> of <integer> : date
- first <day of week> of <month and year> : date
- first friday of <month and year> : date
- first monday of <month and year> : date
- first saturday of <month and year> : date
- first sunday of <month and year> : date
- first thursday of <month and year> : date
- first tuesday of <month and year> : date

- first wednesday of <month and year> : date
- january <integer> of <integer> : date
- july <integer> of <integer> : date
- june <integer> of <integer> : date
- march <integer> of <integer> : date
- may <integer> of <integer> : date
- normalized date of <fixlet\_header> : date
- november <integer> of <integer> : date
- october <integer> of <integer> : date
- september <integer> of <integer> : date
- source release date of <bes fixlet> : date
- start date of <bes action> : date
- <bes fixlet field value> as date : date
- <string> as date : date
- <time> as local date : date
- <time> as universal date : date
- <day of month> & <month and year> : date
- <day of year> & <month and year> : date
- <day of year> & <year> : date
- <month and year> & <day of month> : date
- <month and year> & <day of year> : date
- <year> & <day of year> : date

#### Properties:

- day\_of\_month of <date> : day of month
- day\_of\_week of <date> : day of week
- day\_of\_year of <date> : day of year
- extrema of <date> : ( date, date )
- maximum of <date> : date
- minimum of <date> : date
- month of <date> : month
- month\_and\_year of <date> : month and year

- unique value of <date> : date with multiplicity
- year of <date> : year

#### Casts:

- <date> as string : string

#### Operators:

- <date> & <time of day with time zone> : time
- <date> + <number of months> : date
- <date> + <time interval> : date
- <date> - <date> : time interval
- <date> - <number of months> : date
- <date> - <time interval> : date
- <date> < <date> : boolean
- <date> <= <date> : boolean
- <date> = <date> : boolean
- <format> + <date> : format
- <number of months> + <date> : date
- <time interval> + <date> : date
- <time of day with time zone> & <date> : time

## date with multiplicity

The <date with multiplicity> inspectors deal with arrays of dates, allowing you to extract unique dates and count them.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <date> : date with multiplicity

Properties:

- multiplicity of <date with multiplicity> : integer

## day of month

The `day of month` type represents a day of the month.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- current `day_of_month` : day of month
- day of <day of year> : day of month
- `day_of_month` <integer> : day of month
- `day_of_month` <string> : day of month
- `day_of_month` of <date> : day of month
- days run of <monthly task trigger> : day of month
- <integer> as `day_of_month` : day of month
- <string> as `day_of_month` : day of month

Properties:

- extrema of <day of month> : ( day of month, day of month )
- maximum of <day of month> : day of month
- minimum of <day of month> : day of month
- unique value of <day of month> : day of month with multiplicity

Casts:

- <day of month> as integer : integer
- <day of month> as string : string
- <day of month> as two digits : string

#### Operators:

- <day of month> & <month and year> : date
- <day of month> & <month> : day of year
- <day of month> + <time interval> : day of month
- <day of month> - <day of month> : time interval
- <day of month> - <time interval> : day of month
- <day of month> < <day of month> : boolean
- <day of month> <= <day of month> : boolean
- <day of month> = <day of month> : boolean
- <month and year> & <day of month> : date
- <month> & <day of month> : day of year
- <time interval> + <day of month> : day of month

### day of month with multiplicity

The <day of month with multiplicity> inspectors deal with day-of-month arrays, allowing you to extract unique day-of-month values and count them.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <day of month> : day of month with multiplicity

Properties:

- multiplicity of <day of month with multiplicity> : integer

## day of week

The `day of week` inspectors provide tools for handling day-of-week types, which include Monday, Tuesday, etc.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- `current day_of_week` : day of week
- `day_of_week <string>` : day of week
- `day_of_week constraint of <bes action>` : day of week
- `day_of_week of <date>` : day of week
- `days run of <monthlydown task trigger>` : day of week
- `days run of <weekly task trigger>` : day of week
- `friday` : day of week
- `monday` : day of week
- `saturday` : day of week
- `sunday` : day of week
- `thursday` : day of week
- `tuesday` : day of week
- `wednesday` : day of week
- `<string> as day_of_week` : day of week

Properties:

- unique value of <day of week> : day of week with multiplicity

Casts:



- <day of week> as string : string
- <day of week> as three letters : string

Operators:

- <day of week> + <time interval> : day of week
- <day of week> - <day of week> : time interval
- <day of week> - <time interval> : day of week
- <day of week> = <day of week> : boolean
- <format> + <day of week> : format
- <time interval> + <day of week> : day of week

## day of week with multiplicity

The <day of week with multiplicity> inspectors deal with day-of-week arrays, allowing you to extract unique day-of-week values and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <day of week> : day of week with multiplicity

Properties:

- multiplicity of <day of week with multiplicity> : integer

## day of year

The <day of year> inspectors provide tools for dealing and calculating with day-of-month types, which are of the form Sun, 01 Apr 2007.

## Version

## Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- april <integer> : day of year
- august <integer> : day of year
- current day\_of\_year : day of year
- day\_of\_year of <date> : day of year
- december <integer> : day of year
- february <integer> : day of year
- january <integer> : day of year
- july <integer> : day of year
- june <integer> : day of year
- march <integer> : day of year
- may <integer> : day of year
- november <integer> : day of year
- october <integer> : day of year
- september <integer> : day of year
- <day of month> & <month> : day of year
- <month> & <day of month> : day of year

Properties:

- day of <day of year> : day of month
- extrema of <day of year> : ( day of year, day of year )
- maximum of <day of year> : day of year
- minimum of <day of year> : day of year
- month of <day of year> : month
- unique value of <day of year> : day of year with multiplicity

Casts:

- <day of year> as string : string

#### Operators:

- <day of year> & <month and year> : date
- <day of year> & <year> : date
- <day of year> + <number of months> : day of year
- <day of year> + <time interval> : day of year
- <day of year> - <day of year> : time interval
- <day of year> - <number of months> : day of year
- <day of year> - <time interval> : day of year
- <day of year> < <day of year> : boolean
- <day of year> <= <day of year> : boolean
- <day of year> = <day of year> : boolean
- <month and year> & <day of year> : date
- <number of months> + <day of year> : day of year
- <time interval> + <day of year> : day of year
- <year> & <day of year> : date

### day of year with multiplicity

The <day of year with multiplicity> inspectors deal with day-of-year arrays, allowing you to extract unique day-of-year values and count them.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <day of year> : day of year with multiplicity

Properties:

- multiplicity of <day of year with multiplicity> : integer

## month

The <month> inspectors provide tools for dealing and calculating with month types, which are of the form January, February, and more. This set of inspectors includes each month as a self-named object.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- april : month
- august : month
- current month : month
- december : month
- february : month
- january : month
- july : month
- june : month
- march : month
- may : month
- month <integer> : month
- month <string> : month
- month of <date> : month
- month of <day of year> : month
- month of <month and year> : month
- months run of <monthly task trigger> : month
- months run of <monthlydow task trigger> : month
- november : month

- october : month
- september : month
- <integer> as month : month
- <string> as month : month

#### Properties:

- extrema of <month> : ( month, month )
- maximum of <month> : month
- minimum of <month> : month
- unique value of <month> : month with multiplicity

#### Casts:

- <month> as integer : integer
- <month> as string : string
- <month> as three letters : string
- <month> as two digits : string

#### Operators:

- <day of month> & <month> : day of year
- <month> & <day of month> : day of year
- <month> & <year> : month and year
- <month> + <number of months> : month
- <month> - <month> : number of months
- <month> - <number of months> : month
- <month> < <month> : boolean
- <month> <= <month> : boolean
- <month> = <month> : boolean
- <number of months> + <month> : month
- <year> & <month> : month and year

## month and year

The <month and year> inspectors provide tools for dealing and calculating with month-and-year types, which are of the form month of year, eg., January of 2007.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- april of <integer> : month and year
- august of <integer> : month and year
- current month\_and\_year : month and year
- december of <integer> : month and year
- february of <integer> : month and year
- january of <integer> : month and year
- july of <integer> : month and year
- june of <integer> : month and year
- march of <integer> : month and year
- may of <integer> : month and year
- month\_and\_year of <date> : month and year
- november of <integer> : month and year
- october of <integer> : month and year
- september of <integer> : month and year
- <month> & <year> : month and year
- <year> & <month> : month and year

Properties:

- extrema of <month and year> : ( month and year, month and year )
- first <day of week> of <month and year> : date
- first friday of <month and year> : date

- first monday of <month and year> : date
- first saturday of <month and year> : date
- first sunday of <month and year> : date
- first thursday of <month and year> : date
- first tuesday of <month and year> : date
- first wednesday of <month and year> : date
- length of <month and year> : time interval
- maximum of <month and year> : month and year
- minimum of <month and year> : month and year
- month of <month and year> : month
- unique value of <month and year> : month and year with multiplicity
- year of <month and year> : year

#### Casts:

- <month and year> as string : string

#### Operators:

- <day of month> & <month and year> : date
- <day of year> & <month and year> : date
- <month and year> & <day of month> : date
- <month and year> & <day of year> : date
- <month and year> + <number of months> : month and year
- <month and year> - <month and year> : number of months
- <month and year> - <number of months> : month and year
- <month and year> < <month and year> : boolean
- <month and year> <= <month and year> : boolean
- <month and year> = <month and year> : boolean
- <number of months> + <month and year> : month and year

## month and year with multiplicity

The <month and year with multiplicity> inspectors deal with month-and-year arrays, allowing you to extract unique month-and-year values and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <month and year> : month and year with multiplicity

Properties:

- multiplicity of <month and year with multiplicity> : integer

## month with multiplicity

The <month with multiplicity> inspectors deal with month arrays, allowing you to extract unique month values and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <month> : month with multiplicity

Properties:

- multiplicity of <month with multiplicity> : integer



## number of months

The <number of months> inspectors provide tools for dealing and calculating with number-of-month types, which are similar to integers, but with yearly roll-over.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- month : number of months
- year : number of months
- <month and year> - <month and year> : number of months
- <month> - <month> : number of months
- <year> - <year> : number of months

Properties:

- extrema of <number of months> : ( number of months, number of months )
- maximum of <number of months> : number of months
- minimum of <number of months> : number of months
- unique value of <number of months> : number of months with multiplicity

Casts:

- <number of months> as string : string

Operators:

- - <number of months> : number of months
- <date> + <number of months> : date
- <date> - <number of months> : date
- <day of year> + <number of months> : day of year

- <day of year> - <number of months> : day of year
- <integer> \* <number of months> : number of months
- <month and year> + <number of months> : month and year
- <month and year> - <number of months> : month and year
- <month> + <number of months> : month
- <month> - <number of months> : month
- <number of months> \* <integer> : number of months
- <number of months> + <date> : date
- <number of months> + <day of year> : day of year
- <number of months> + <month and year> : month and year
- <number of months> + <month> : month
- <number of months> + <number of months> : number of months
- <number of months> + <year> : year
- <number of months> - <number of months> : number of months
- <number of months> / <integer> : number of months
- <number of months> / <number of months> : integer
- <number of months> < <number of months> : boolean
- <number of months> <= <number of months> : boolean
- <number of months> = <number of months> : boolean
- <number of months> mod <number of months> : number of months
- <year> + <number of months> : year
- <year> - <number of months> : year

## number of months with multiplicity

The <number of months with multiplicity> inspectors deal with number-of-month arrays, allowing you to extract unique number-of-month values and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <number of months> : number of months with multiplicity

#### Properties:

- multiplicity of <number of months with multiplicity> : integer

## time

A <time> object is used to identify a point in time. Time objects are used to represent important properties of objects such as the modification time of a file. You can create time objects from literal strings. The format of the string is defined by the MIME standard. The difference between two Time objects may be calculated by subtracting them and yields time intervals. Time intervals may be added or subtracted from time objects to obtain time objects.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

#### Creation:

- accessed time of <filesystem object> : time
- accessed time of <symlink> : time
- account expiration of <local user> : time
- account expiration of <user> : time
- active start time of <action> : time
- aol error time of <file> : time
- apparent registration server time : time
- backup time of <filesystem object> : time
- boot time of <operating system> : time
- change time of <filesystem object> : time
- change time of <symlink> : time
- complete time of <action> : time

- creation date of <bes site> : time
- creation date of <palm application> : time
- creation time of <bes activation> : time
- creation time of <bes computer group> : time
- creation time of <bes fixlet> : time
- creation time of <bes user> : time
- creation time of <filesystem object> : time
- creation time of <process> : time
- custom site subscription effective date <string> : time
- date <integer> of <array> : time
- date <string> of <dictionary> : time
- date <string> of <preference> : time
- date of <osxvalue> : time
- date of <task registration info> : time
- device hotsync time of <palm device> : time
- effective date of <action lock state> : time
- effective date of <plugin store key> : time
- effective date of <setting> : time
- effective time of <runlevel> : time
- end boundary of <task trigger> : time
- end of <statistic range> : time
- end of <statistical bin> : time
- end of <time range> : time
- end time of <bes action result> : time
- expiration date of <action lock state> : time
- expiration date of <license> : time
- expiration time of <bes action> : time
- expiration time of <route> : time
- first became relevant of <bes fixlet result> : time
- first start time of <application usage summary instance> : time
- first start time of <application usage summary> : time
- hotsync time of <palm device> : time

- init date of <volume> : time
- invalid after of <x509 certificate> : time
- invalid before of <x509 certificate> : time
- last active time of <action> : time
- last became nonrelevant of <bes fixlet result> : time
- last became relevant of <bes fixlet result> : time
- last change time of <action> : time
- last command time of <client> : time
- last gather time of <site> : time
- last login time of <bes user> : time
- last logoff of <local user> : time
- last logoff of <user> : time
- last logon of <local user> : time
- last logon of <user> : time
- last relay select time : time
- last report time of <bes computer> : time
- last report time of <client> : time
- last run time of <scheduled task> : time
- last start time of <application usage summary instance> : time
- last start time of <application usage summary> : time
- last time of <analysis> : time
- last time seen of <application usage summary instance> : time
- last time seen of <application usage summary> : time
- last write time of <registry key> : time
- lease expires of <network adapter> : time
- lease obtained of <network adapter> : time
- local time <string> : time
- modification time of <bes activation> : time
- modification time of <bes fixlet> : time
- modification time of <execution> : time
- modification time of <filesystem object> : time
- modification time of <symlink> : time

- modification time of <volume> : time
- next run time of <scheduled task> : time
- now : time now of <registration server> : time
- pending time of <action> : time
- sample time of <active directory group> : time
- sample time of <active directory local computer> : time
- sample time of <active directory local user> : time
- start boundary of <task trigger> : time
- start date of <license> : time
- start of <statistic range> : time
- start of <statistical bin> : time
- start of <time range> : time
- start time of <bes action result> : time
- start time of <process> : time
- subscribe time of <site> : time
- time <string> : time
- time generated of <event log record> : time
- time issued of <bes action> : time
- time of <execution> : time
- time of <historical computer count> : time
- time of <historical fixlet count> : time
- time stopped of <bes action> : time
- time value <integer> of <wmi select> : time
- time value of <wmi select> : time
- time written of <event log record> : time
- timestamp of <bes comment> : time
- universal time <string> : time
- windows display time <string> : time
- <bes fixlet field value> as time : time
- <registry key value> as time : time
- <string> as local time : time
- <string> as time : time

- <string> as universal time : time
- <string> as windows display time : time
- <date> & <time of day with time zone> : time
- <time of day with time zone> & <date> : time

#### Properties:

- date <time zone> of <time> : date
- extrema of <time> : ( time, time )
- maximum of <time> : time
- minimum of <time> : time
- time <time zone> of <time> : time of day with time zone
- unique value of <time> : time with multiplicity

#### Casts:

- <time> as local date : date
- <time> as local string : string
- <time> as string : string
- <time> as universal date : date
- <time> as universal string : string

#### Operators:

- <format> + <time> : format
- <time interval> & <time> : time range
- <time interval> + <time> : time
- <time range> & <time> : time range
- <time range> contains <time> : boolean
- <time> & <time interval> : time range
- <time> & <time range> : time range
- <time> & <time> : time range
- <time> + <time interval> : time
- <time> - <time interval> : time

- <time> - <time> : time interval
- <time> < <time> : boolean
- <time> <= <time> : boolean
- <time> = <time> : boolean

## time interval

The time interval type represents an interval of time. They have a resolution of 1 microsecond.

Version	Platforms
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- account lockout duration of <security database> : time interval
- account lockout observation window of <security database> : time interval
- action duration of <evaluation cycle> : time interval
- api duration of <evaluation cycle> : time interval
- archive duration of <evaluation cycle> : time interval
- average duration of <evaluation cycle> : time interval
- client query duration of <evaluation cycle> : time interval
- day : time interval
- days interval of <daily task trigger> : time interval
- delay of <boot task trigger> : time interval
- delay of <event task trigger> : time interval
- delay of <logon task trigger> : time interval
- delay of <registration task trigger> : time interval
- delay of <session state change task trigger> : time interval
- delete expired task after of <task settings> : time interval
- duration of <task repetition pattern> : time interval
- elapsed time of <process> : time interval



- evaluation period of <bes property> : time interval
- exec time of <process> : time interval
- execution time limit of <task settings> : time interval
- execution time limit of <task trigger> : time interval
- force logoff interval of <security database> : time interval
- gather duration of <evaluation cycle> : time interval
- gather schedule time interval of <site> : time interval
- greatest time interval : time interval hour : time interval
- idle duration of <task idle settings> : time interval
- interval of <task repetition pattern> : time interval
- kernel time of <process> : time interval
- least time interval : time interval
- length of <month and year> : time interval
- length of <statistical bin> : time interval
- length of <time range> : time interval
- length of <year> : time interval
- maximum duration of <evaluation cycle> : time interval
- maximum password age of <security database> : time interval
- mean sample interval of <statistical bin> : time interval
- message postpone delay of <bes action> : time interval
- message timeout delay of <bes action> : time interval
- microsecond : time interval millisecond : time interval
- minimum password age of <security database> : time interval
- minute : time interval
- other duration of <evaluation cycle> : time interval
- password age of <local user> : time interval
- password age of <user> : time interval
- postaction force delay of <bes action> : time interval
- postaction postpone delay of <bes action> : time interval
- property duration of <evaluation cycle> : time interval
- quiet mode duration of <evaluation cycle> : time interval
- random delay of <daily task trigger> : time interval

- random delay of <monthly task trigger> : time interval
- random delay of <monthlydow task trigger> : time interval
- random delay of <time task trigger> : time interval
- random delay of <weekly task trigger> : time interval
- reapplication interval of <bes action> : time interval
- relay select duration of <evaluation cycle> : time interval
- relevance duration of <evaluation cycle> : time interval
- report duration of <evaluation cycle> : time interval
- restart interval of <task settings> : time interval
- retry delay of <bes action> : time interval
- second : time interval
- sleep duration of <evaluation cycle> : time interval
- source evaluation period of <bes property> : time interval
- temporal distribution of <bes action> : time interval
- time interval <string> : time interval
- total duration of <application usage summary instance> : time interval
- total duration of <application usage summary> : time interval
- total duration of <evaluation cycle> : time interval
- uptime of <operating system> : time interval
- user time of <process> : time interval
- wait timeout of <task idle settings> : time interval
- week : time interval
- weeks interval of <weekly task trigger> : time interval
- <string> as time interval : time interval
- <date> - <date> : time interval
- <day of month> - <day of month> : time interval
- <day of week> - <day of week> : time interval
- <day of year> - <day of year> : time interval
- <time of day with time zone> - <time of day with time zone> : time interval
- <time of day> - <time of day> : time interval
- <time zone> - <time zone> : time interval
- <time> - <time> : time interval

### Properties:

- absolute value of <time interval> : time interval
- extrema of <time interval> : ( time interval, time interval )
- maximum of <time interval> : time interval
- minimum of <time interval> : time interval
- sum of <time interval> : time interval
- unique value of <time interval> : time interval with multiplicity

### Casts:

- <time interval> as string : string

### Operators:

- <time interval> : time interval
- <date> + <time interval> : date
- <date> - <time interval> : date
- <day of month> + <time interval> : day of month
- <day of month> - <time interval> : day of month
- <day of week> + <time interval> : day of week
- <day of week> - <time interval> : day of week
- <day of year> + <time interval> : day of year
- <day of year> - <time interval> : day of year
- <floating point> / <time interval> : rate
- <format> + <time interval> : format
- <integer> \* <time interval> : time interval
- <rate> \* <time interval> : floating point
- <time interval> & <time> : time range
- <time interval> \* <integer> : time interval
- <time interval> \* <rate> : floating point
- <time interval> + <date> : date
- <time interval> + <day of month> : day of month

- <time interval> + <day of week> : day of week
- <time interval> + <day of year> : day of year
- <time interval> + <time interval> : time interval
- <time interval> + <time of day with time zone> : time of day with time zone
- <time interval> + <time of day> : time of day
- <time interval> + <time zone> : time zone
- <time interval> + <time> : time
- <time interval> - <time interval> : time interval
- <time interval> / <integer> : time interval
- <time interval> / <time interval> : integer
- <time interval> < <time interval> : boolean
- <time interval> <= <time interval> : boolean
- <time interval> = <time interval> : boolean
- <time interval> mod <time interval> : time interval
- <time of day with time zone> + <time interval> : time of day with time zone
- <time of day with time zone> - <time interval> : time of day with time zone
- <time of day> + <time interval> : time of day
- <time of day> - <time interval> : time of day
- <time zone> + <time interval> : time zone
- <time zone> - <time interval> : time zone
- <time> & <time interval> : time range
- <time> + <time interval> : time
- <time> - <time interval> : time

## time interval with multiplicity

The <time interval with multiplicity> inspectors deal with time-interval arrays, allowing you to extract unique time-interval values and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <time interval> : time interval with multiplicity

Properties:

- multiplicity of <time interval with multiplicity> : integer

## time of day

The <time of day> inspectors provide tools for dealing and calculating with time-of-day types, which are of the form HH:MM:SS, as in 12:59:59.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- end time\_of\_day of <bes action> : time of day
- midnight : time of day noon : time of day
- start time\_of\_day of <bes action> : time of day
- time of <time of day with time zone> : time of day
- time range end of <bes action> : time of day
- time range start of <bes action> : time of day
- time\_of\_day <string> : time of day
- <string> as time\_of\_day : time of day

Properties:

- extrema of <time of day> : ( time of day, time of day )
- hour\_of\_day of <time of day> : integer
- maximum of <time of day> : time of day
- minimum of <time of day> : time of day

- minute\_of\_hour of <time of day> : integer
- second\_of\_minute of <time of day> : integer
- two digit hour of <time of day> : string
- two digit minute of <time of day> : string
- two digit second of <time of day> : string
- unique value of <time of day> : time of day with multiplicity

#### Casts:

- <time of day> as string : string

#### Operators:

- <format> + <time of day> : format
- <time interval> + <time of day> : time of day
- <time of day> & <time zone> : time of day with time zone
- <time of day> + <time interval> : time of day
- <time of day> - <time interval> : time of day
- <time of day> - <time of day> : time interval
- <time of day> < <time of day> : boolean
- <time of day> <= <time of day> : boolean
- <time of day> = <time of day> : boolean
- <time zone> & <time of day> : time of day with time zone

## time of day with multiplicity

The <time of day with multiplicity> inspectors deal with time-of-day arrays, allowing you to extract unique time-of-day values and count them.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <time of day> : time of day with multiplicity

Properties:

- multiplicity of <time of day with multiplicity> : integer

## time of day with time zone

The <time of day with time zone> inspectors provide tools for dealing and calculating with time-of-day-with-time-zone types, which are of the form HH:MM:SS +ZZZZ, as in 12:59:59 -0400.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- current time\_of\_day : time of day with time zone
- current time\_of\_day <time zone> : time of day with time zone
- time <time zone> of <time> : time of day with time zone
- zoned time\_of\_day <string> : time of day with time zone
- <string> as local zoned time\_of\_day : time of day with time zone
- <string> as universal zoned time\_of\_day : time of day with time zone
- <string> as zoned time\_of\_day : time of day with time zone
- <time of day> & <time zone> : time of day with time zone
- <time zone> & <time of day> : time of day with time zone

Properties:

- hour\_of\_day of <time of day with time zone> : integer
- minute\_of\_hour of <time of day with time zone> : integer
- second\_of\_minute of <time of day with time zone> : integer

- time of <time of day with time zone> : time of day
- two digit hour of <time of day with time zone> : string
- two digit minute of <time of day with time zone> : string
- two digit second of <time of day with time zone> : string
- unique value of <time of day with time zone> : time of day with time zone with multiplicity
- zone of <time of day with time zone> : time zone

#### Casts:

- <time of day with time zone> as string : string

#### Operators:

- <date> & <time of day with time zone> : time
- <time interval> + <time of day with time zone> : time of day with time zone
- <time of day with time zone> & <date> : time
- <time of day with time zone> & <time zone> : time of day with time zone
- <time of day with time zone> + <time interval> : time of day with time zone
- <time of day with time zone> - <time interval> : time of day with time zone
- <time of day with time zone> - <time of day with time zone> : time interval
- <time of day with time zone> < <time of day with time zone> : boolean
- <time of day with time zone> <= <time of day with time zone> : boolean
- <time of day with time zone> = <time of day with time zone> : boolean
- <time zone> & <time of day with time zone> : time of day with time zone

### time of day with time zone with multiplicity

The <time of day with time zone with multiplicity> inspectors deal with time-of-day-with-time-zone arrays, allowing you to extract unique time-of-day-with-time-zone values and count them.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows



**Version****Platforms**

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <time of day with time zone> : time of day with time zone with multiplicity

Properties:

- multiplicity of <time of day with time zone with multiplicity> : integer

**time range**

The <time range> inspectors provide tools for dealing and calculating with time-range types, which are of the form 'time to time', such as Tue, 18 Apr 2006 16:46:07 -0400 to Wed, 19 Apr 2006 16:46:07 -0400.

**Version****Platforms**

8.0.584.0AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0Debian, Ubuntu

Creation:

- range of <monitor power interval> : time range
- range of <system power interval> : time range
- <time interval> & <time> : time range
- <time> & <time interval> : time range
- <time> & <time> : time range

Properties:

- end of <time range> : time
- final part <time interval> of <time range> : time range
- initial part <time interval> of <time range> : time range

- length of <time range> : time interval
- range after <time> of <time range> : time range
- range before <time> of <time range> : time range
- start of <time range> : time
- unique value of <time range> : time range with multiplicity

#### Casts:

- <time range> as string : string

#### Operators:

- <boolean> \* <time range> : timed( time range, boolean )
- <integer> \* <time range> : timed( time range, integer )
- <time range> & <time range> : time range
- <time range> & <time> : time range
- <time range> \* <boolean> : timed( time range, boolean )
- <time range> \* <integer> : timed( time range, integer )
- <time range> \* <time range> : time range
- <time range> + <time range> : time range
- <time range> = <time range> : boolean
- <time range> contains <time range> : boolean
- <time range> contains <time> : boolean
- <time> & <time range> : time range

### time range with multiplicity

The <time range with multiplicity> inspectors deal with time-range arrays, allowing you to extract unique time-range values and count them.

#### Version

#### Platforms

8.0.584.0AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0Debian, Ubuntu

Creation:

- unique value of <time range> : time range with multiplicity

Properties:

- multiplicity of <time range with multiplicity> : integer

## time with multiplicity

The <time with multiplicity> inspectors deal with time arrays, allowing you to extract unique time values and count them.

### Version

### Platforms

8.0.584.0AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0Debian, Ubuntu

Creation:

- unique value of <time> : time with multiplicity

Properties:

- multiplicity of <time with multiplicity> : integer

## time zone

Time zones are used in conjunction with the time object. Time zones have a resolution of 1 minute.

### Version

### Platforms

8.0.584.0AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0Debian, Ubuntu

Creation:

- local time zone : time zone
- time zone <string> : time zone

- universal time zone : time zone
- zone of <time of day with time zone> : time zone
- <string> as time zone : time zone

#### Properties:

- current time\_of\_day <time zone> : time of day with time zone
- unique value of <time zone> : time zone with multiplicity

#### Casts:

- <time zone> as string : string

#### Operators:

- <time interval> + <time zone> : time zone
- <time of day with time zone> & <time zone> : time of day with time zone
- <time of day> & <time zone> : time of day with time zone
- <time zone> & <time of day with time zone> : time of day with time zone
- <time zone> & <time of day> : time of day with time zone
- <time zone> + <time interval> : time zone
- <time zone> - <time interval> : time zone
- <time zone> - <time zone> : time interval
- <time zone> = <time zone> : boolean

## time zone with multiplicity

The <time zone with multiplicity> inspectors deal with time zone arrays, allowing you to extract unique time zone values and count them.

### Version

### Platforms

8.0.584.0AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0Debian, Ubuntu

Creation:

- unique value of <time zone> : time zone with multiplicity

Properties:

- multiplicity of <time zone with multiplicity> : integer

## year

The `year` type represents a calendar year.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- current year : year
- year <integer> : year
- year <string> : year
- year of <date> : year
- year of <month and year> : year
- <integer> as year : year
- <string> as year : year

Properties:

- extrema of <year> : ( year, year )
- leap of <year> : boolean
- length of <year> : time interval
- maximum of <year> : year
- minimum of <year> : year
- unique value of <year> : year with multiplicity

Casts:

- <year> as integer : integer
- <year> as string : string

#### Operators:

- <day of year> & <year> : date
- <month> & <year> : month and year
- <number of months> + <year> : year
- <year> & <day of year> : date
- <year> & <month> : month and year
- <year> + <number of months> : year
- <year> - <number of months> : year
- <year> - <year> : number of months
- <year> < <year> : boolean
- <year> <= <year> : boolean
- <year> = <year> : boolean

### **year with multiplicity**

The <year with multiplicity> inspectors deal with year arrays, allowing you to extract unique year values and count them.

#### **Version**

#### **Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <year> : year with multiplicity

#### Properties:

- multiplicity of <year with multiplicity> : integer

# DMI

## DMI

No documentation exists.

Version	Platforms
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- dmi : dmi

Properties:

- additional\_information <integer> of <dmi> : dmi additional\_information
- additional\_information of <dmi> : dmi additional\_information
- b32\_bit\_memory\_error\_information <integer> of <dmi> : dmi b32\_bit\_memory\_error\_information
- b32\_bit\_memory\_error\_information of <dmi> : dmi b32\_bit\_memory\_error\_information
- b64\_bit\_memory\_error\_information <integer> of <dmi> : dmi b64\_bit\_memory\_error\_information
- b64\_bit\_memory\_error\_information of <dmi> : dmi b64\_bit\_memory\_error\_information
- base\_board\_information <integer> of <dmi> : dmi base\_board\_information
- base\_board\_information of <dmi> : dmi base\_board\_information
- bios\_information <integer> of <dmi> : dmi bios\_information
- bios\_information of <dmi> : dmi bios\_information
- bios\_language\_information <integer> of <dmi> : dmi bios\_language\_information
- bios\_language\_information of <dmi> : dmi bios\_language\_information
- built\_in\_pointing\_device <integer> of <dmi> : dmi built\_in\_pointing\_device
- built\_in\_pointing\_device of <dmi> : dmi built\_in\_pointing\_device

- cache\_information <integer> of <dmi> : dmi cache\_information
- cache\_information of <dmi> : dmi cache\_information
- cooling\_device <integer> of <dmi> : dmi cooling\_device
- cooling\_device of <dmi> : dmi cooling\_device
- electrical\_current\_probe <integer> of <dmi> : dmi electrical\_current\_probe
- electrical\_current\_probe of <dmi> : dmi electrical\_current\_probe
- end\_of\_table <integer> of <dmi> : dmi end\_of\_table
- end\_of\_table of <dmi> : dmi end\_of\_table
- group\_associations <integer> of <dmi> : dmi group\_associations
- group\_associations of <dmi> : dmi group\_associations
- hardware\_security <integer> of <dmi> : dmi hardware\_security
- hardware\_security of <dmi> : dmi hardware\_security
- inactive <integer> of <dmi> : dmi inactive
- inactive of <dmi> : dmi inactive
- ipmi\_device\_information <integer> of <dmi> : dmi ipmi\_device\_information
- ipmi\_device\_information of <dmi> : dmi ipmi\_device\_information
- management\_device <integer> of <dmi> : dmi management\_device
- management\_device of <dmi> : dmi management\_device
- management\_device\_component <integer> of <dmi> : dmi management\_device\_component
- management\_device\_component of <dmi> : dmi management\_device\_component
- management\_device\_threshold\_data <integer> of <dmi> : dmi management\_device\_threshold\_data
- management\_device\_threshold\_data of <dmi> : dmi management\_device\_threshold\_data
- memory\_array\_mapped\_address <integer> of <dmi> : dmi memory\_array\_mapped\_address
- memory\_array\_mapped\_address of <dmi> : dmi memory\_array\_mapped\_address
- memory\_channel <integer> of <dmi> : dmi memory\_channel
- memory\_channel of <dmi> : dmi memory\_channel
- memory\_controller\_information <integer> of <dmi> : dmi memory\_controller\_information
- memory\_controller\_information of <dmi> : dmi memory\_controller\_information



- memory\_controller\_information of <dmi> : dmi memory\_controller\_information
- memory\_device <integer> of <dmi> : dmi memory\_device
- memory\_device of <dmi> : dmi memory\_device
- memory\_device\_mapped\_address <integer> of <dmi> : dmi memory\_device\_mapped\_address
- memory\_device\_mapped\_address of <dmi> : dmi memory\_device\_mapped\_address
- memory\_module\_information <integer> of <dmi> : dmi memory\_module\_information
- memory\_module\_information of <dmi> : dmi memory\_module\_information
- oem\_string <integer> of <dmi> : string
- oem\_string of <dmi> : string
- on\_board\_devices\_information <integer> of <dmi> : dmi on\_board\_devices\_information
- on\_board\_devices\_information of <dmi> : dmi on\_board\_devices\_information
- onboard\_devices\_extended\_information <integer> of <dmi> : dmi onboard\_devices\_extended\_information
- onboard\_devices\_extended\_information of <dmi> : dmi onboard\_devices\_extended\_information
- out\_of\_band\_remote\_access <integer> of <dmi> : dmi out\_of\_band\_remote\_access
- out\_of\_band\_remote\_access of <dmi> : dmi out\_of\_band\_remote\_access
- physical\_memory\_array <integer> of <dmi> : dmi physical\_memory\_array
- physical\_memory\_array of <dmi> : dmi physical\_memory\_array
- port\_connector\_information <integer> of <dmi> : dmi port\_connector\_information
- port\_connector\_information of <dmi> : dmi port\_connector\_information
- portable\_battery <integer> of <dmi> : dmi portable\_battery
- portable\_battery of <dmi> : dmi portable\_battery
- processor\_information <integer> of <dmi> : dmi processor\_information
- processor\_information of <dmi> : dmi processor\_information
- system\_boot\_information <integer> of <dmi> : dmi system\_boot\_information
- system\_boot\_information of <dmi> : dmi system\_boot\_information
- system\_configuration\_option <integer> of <dmi> : string
- system\_configuration\_option of <dmi> : string
- system\_enclosure\_or\_chassis <integer> of <dmi> : dmi system\_enclosure\_or\_chassis
- system\_enclosure\_or\_chassis of <dmi> : dmi system\_enclosure\_or\_chassis

- system\_information <integer> of <dmi> : dmi system\_information
- system\_information of <dmi> : dmi system\_information
- system\_power\_controls <integer> of <dmi> : dmi system\_power\_controls
- system\_power\_controls of <dmi> : dmi system\_power\_controls
- system\_power\_supply <integer> of <dmi> : dmi system\_power\_supply
- system\_power\_supply of <dmi> : dmi system\_power\_supply
- system\_reset <integer> of <dmi> : dmi system\_reset
- system\_reset of <dmi> : dmi system\_reset
- system\_slots <integer> of <dmi> : dmi system\_slots
- system\_slots of <dmi> : dmi system\_slots
- temperature\_probe <integer> of <dmi> : dmi temperature\_probe
- temperature\_probe of <dmi> : dmi temperature\_probe
- voltage\_probe <integer> of <dmi> : dmi voltage\_probe
- voltage\_probe of <dmi> : dmi voltage\_probe

## dmi additional\_information

No documentation exists.

Version	Platforms
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- additional\_information <integer> of <dmi> : dmi additional\_information
- additional\_information of <dmi> : dmi additional\_information

Properties:

- length of <dmi additional\_information> : integer
- number\_of\_additional\_information\_entries of <dmi additional\_information> : integer

## **dmi b32\_bit\_memory\_error\_information**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- b32\_bit\_memory\_error\_information <integer> of <dmi> : dmi  
b32\_bit\_memory\_error\_information
- b32\_bit\_memory\_error\_information of <dmi> : dmi b32\_bit\_memory\_error\_information

Properties:

- device\_error\_address of <dmi b32\_bit\_memory\_error\_information> : integer
- error\_granularity of <dmi b32\_bit\_memory\_error\_information> : integer
- error\_operation of <dmi b32\_bit\_memory\_error\_information> : integer
- error\_resolution of <dmi b32\_bit\_memory\_error\_information> : integer
- error\_type of <dmi b32\_bit\_memory\_error\_information> : integer
- length of <dmi b32\_bit\_memory\_error\_information> : integer
- memory\_array\_error\_address of <dmi b32\_bit\_memory\_error\_information> : integer
- vendor\_syndrome of <dmi b32\_bit\_memory\_error\_information> : integer
- 

## **dmi b64\_bit\_memory\_error\_information**

No documentation exists.

Creation:

- b64\_bit\_memory\_error\_information <integer> of <dmi> : dmi  
b64\_bit\_memory\_error\_information
- b64\_bit\_memory\_error\_information of <dmi> : dmi b64\_bit\_memory\_error\_information

#### Properties:

- device\_error\_address of <dmi b64\_bit\_memory\_error\_information> : integer
- error\_granularity of <dmi b64\_bit\_memory\_error\_information> : integer
- error\_operation of <dmi b64\_bit\_memory\_error\_information> : integer
- error\_resolution of <dmi b64\_bit\_memory\_error\_information> : integer
- error\_type of <dmi b64\_bit\_memory\_error\_information> : integer
- length of <dmi b64\_bit\_memory\_error\_information> : integer
- memory\_array\_error\_address of <dmi b64\_bit\_memory\_error\_information> : integer
- vendor\_syndrome of <dmi b64\_bit\_memory\_error\_information> : integer

## dmi base\_board\_information

No documentation exists.

Version	Platforms
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- base\_board\_information <integer> of <dmi> : dmi base\_board\_information
- base\_board\_information of <dmi> : dmi base\_board\_information

#### Properties:

- asset\_tag of <dmi base\_board\_information> : string
- board\_type of <dmi base\_board\_information> : integer
- chassis\_handle of <dmi base\_board\_information> : integer

- feature\_flags of <dmi base\_board\_information> : integer
- length of <dmi base\_board\_information> : integer
- location\_in\_chassis of <dmi base\_board\_information> : string
- manufacturer of <dmi base\_board\_information> : string
- number\_of\_contained\_object\_handles of <dmi base\_board\_information> : integer
- product of <dmi base\_board\_information> : string
- serial\_number of <dmi base\_board\_information> : string
- version of <dmi base\_board\_information> : string

## dmi bios\_information

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- bios\_information <integer> of <dmi> : dmi bios\_information
- bios\_information of <dmi> : dmi bios\_information

Properties:

- bios\_characteristics of <dmi bios\_information> : integer
- bios\_release\_date of <dmi bios\_information> : string
- bios\_rom\_size of <dmi bios\_information> : integer
- bios\_starting\_address\_segment of <dmi bios\_information> : integer
- bios\_version of <dmi bios\_information> : string
- embedded\_controller\_firmware\_major\_release of <dmi bios\_information> : integer
- embedded\_controller\_firmware\_minor\_release of <dmi bios\_information> : integer
- ength of <dmi bios\_information> : integer
- system\_bios\_major\_release of <dmi bios\_information> : integer
- system\_bios\_minor\_release of <dmi bios\_information> : integer

- vendor of <dmi bios\_information> : string

## **dmi bios\_language\_information**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
-----------	----------------

9.5.7.90	Solaris
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Creation:

- bios\_language\_information <integer> of <dmi> : dmi bios\_language\_information
- bios\_language\_information of <dmi> : dmi bios\_language\_information

Properties:

- current\_language of <dmi bios\_language\_information> : string
- flags of <dmi bios\_language\_information> : integer
- installable\_languages of <dmi bios\_language\_information> : integer
- length of <dmi bios\_language\_information> : integer
- reserved of <dmi bios\_language\_information> : binary\_string
- reserved of <dmi bios\_language\_information> : string

## **dmi built\_in\_pointing\_device**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- built\_in\_pointing\_device <integer> of <dmi> : dmi built\_in\_pointing\_device

- `built_in_pointing_device` of `<dmi>` : `dmi built_in_pointing_device`

#### Properties:

- `interface` of `<dmi built_in_pointing_device>` : `integer`
- `length` of `<dmi built_in_pointing_device>` : `integer`
- `number_of_buttons` of `<dmi built_in_pointing_device>` : `integer`
- `type` of `<dmi built_in_pointing_device>` : `integer`

## **dmi cache\_information**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- `cache_information <integer>` of `<dmi>` : `dmi cache_information`
- `cache_information` of `<dmi>` : `dmi cache_information`

#### Properties:

- `associativity` of `<dmi cache_information>` : `integer`
- `cache_configuration` of `<dmi cache_information>` : `integer`
- `cache_speed` of `<dmi cache_information>` : `integer`
- `current_sram_type` of `<dmi cache_information>` : `integer`
- `error_correction_type` of `<dmi cache_information>` : `integer`
- `installed_size` of `<dmi cache_information>` : `integer`
- `length` of `<dmi cache_information>` : `integer`
- `maximum_cache_size` of `<dmi cache_information>` : `integer`
- `socket_designation` of `<dmi cache_information>` : `string`
- `supported_sram_type` of `<dmi cache_information>` : `integer`

- system\_cache\_type of <dmi cache\_information> : integer

## **dmi cooling\_device**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- cooling\_device <integer> of <dmi> : dmi cooling\_device
- cooling\_device of <dmi> : dmi cooling\_device

Properties:

- cooling\_unit\_group of <dmi cooling\_device> : integer
- device\_type\_and\_status of <dmi cooling\_device> : integer
- length of <dmi cooling\_device> : integer
- nominal\_speed of <dmi cooling\_device> : integer
- oem\_defined of <dmi cooling\_device> : integer
- temperature\_probe\_handle of <dmi cooling\_device> : integer

## **dmi electrical\_current\_probe**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- electrical\_current\_probe <integer> of <dmi> : dmi electrical\_current\_probe



- electrical\_current\_probe of <dmi> : dmi electrical\_current\_probe

#### Properties:

- accuracy of <dmi electrical\_current\_probe> : integer
- description of <dmi electrical\_current\_probe> : string
- length of <dmi electrical\_current\_probe> : integer
- location\_and\_status of <dmi electrical\_current\_probe> : integer
- maximum\_value of <dmi electrical\_current\_probe> : integer
- minimum\_value of <dmi electrical\_current\_probe> : integer
- nominal\_value of <dmi electrical\_current\_probe> : integer
- oem\_defined of <dmi electrical\_current\_probe> : integer
- resolution of <dmi electrical\_current\_probe> : integer
- tolerance of <dmi electrical\_current\_probe> : integer

## dmi end\_of\_table

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- end\_of\_table <integer> of <dmi> : dmi end\_of\_table
- end\_of\_table of <dmi> : dmi end\_of\_table

#### Properties:

- length of <dmi end\_of\_table> : integer

## **dmi group\_associations**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- group\_associations <integer> of <dmi> : dmi group\_associations
- group\_associations of <dmi> : dmi group\_associations

Properties:

- group\_name of <dmi group\_associations> : string
- item\_handle of <dmi group\_associations> : integer
- item\_type of <dmi group\_associations> : integer
- length of <dmi group\_associations> : integer

## **dmi hardware\_security**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- hardware\_security <integer> of <dmi> : dmi hardware\_security
- hardware\_security of <dmi> : dmi hardware\_security

Properties:

- hardware\_security\_settings of <dmi hardware\_security> : integer
- length of <dmi hardware\_security> : integer

## **dmi inactive**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- inactive <integer> of <dmi> : dmi inactive
- inactive of <dmi> : dmi inactive

Properties:

- length of <dmi inactive> : integer

## **dmi ipmi\_device\_information**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- ipmi\_device\_information <integer> of <dmi> : dmi ipmi\_device\_information
- ipmi\_device\_information of <dmi> : dmi ipmi\_device\_information

Properties:

- base\_address of <dmi ipmi\_device\_information> : integer
- i2c\_slave\_address of <dmi ipmi\_device\_information> : integer
- interface\_type of <dmi ipmi\_device\_information> : integer
- ipmi\_specification\_revision of <dmi ipmi\_device\_information> : integer
- length of <dmi ipmi\_device\_information> : integer
- nv\_storage\_device\_address of <dmi ipmi\_device\_information> : integer

## dmi management\_device

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- management\_device <integer> of <dmi> : dmi management\_device
- management\_device of <dmi> : dmi management\_device

Properties:

- address of <dmi management\_device> : integer
- address\_type of <dmi management\_device> : integer
- description of <dmi management\_device> : string
- length of <dmi management\_device> : integer
- type of <dmi management\_device> : integer

## dmi management\_device\_component

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows

Version	Platforms
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- management\_device\_component <integer> of <dmi> : dmi management\_device\_component
- management\_device\_component of <dmi> : dmi management\_device\_component

Properties:

- component\_handle of <dmi management\_device\_component> : integer
- description of <dmi management\_device\_component> : string
- length of <dmi management\_device\_component> : integer
- management\_device\_handle of <dmi management\_device\_component> : integer
- threshold\_handle of <dmi management\_device\_component> : integer

## **dmi management\_device\_threshold\_data**

No documentation exists.

Version	Platforms
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- management\_device\_threshold\_data <integer> of <dmi> : dmi management\_device\_threshold\_data
- management\_device\_threshold\_data of <dmi> : dmi management\_device\_threshold\_data

Properties:

- length of <dmi management\_device\_threshold\_data> : integer
- lower\_threshold\_critical of <dmi management\_device\_threshold\_data> : integer
- lower\_threshold\_non\_critical of <dmi management\_device\_threshold\_data> : integer
- lower\_threshold\_non\_recoverable of <dmi management\_device\_threshold\_data> : integer
- upper\_threshold\_critical of <dmi management\_device\_threshold\_data> : integer
- upper\_threshold\_non\_critical of <dmi management\_device\_threshold\_data> : integer
- upper\_threshold\_non\_recoverable of <dmi management\_device\_threshold\_data> : integer

## **dmi memory\_array\_mapped\_address**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- memory\_array\_mapped\_address <integer> of <dmi> : dmi memory\_array\_mapped\_address
- memory\_array\_mapped\_address of <dmi> : dmi memory\_array\_mapped\_address

Properties:

- ending\_address of <dmi memory\_array\_mapped\_address> : integer
- length of <dmi memory\_array\_mapped\_address> : integer
- memory\_array\_handle of <dmi memory\_array\_mapped\_address> : integer
- partition\_width of <dmi memory\_array\_mapped\_address> : integer
- starting\_address of <dmi memory\_array\_mapped\_address> : integer

## dmi memory\_channel

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- memory\_channel <integer> of <dmi> : dmi memory\_channel
- memory\_channel of <dmi> : dmi memory\_channel

Properties:

- channel\_type of <dmi memory\_channel> : integer
- length of <dmi memory\_channel> : integer
- maximum\_channel\_load of <dmi memory\_channel> : integer
- memory\_device\_count of <dmi memory\_channel> : integer
- memory\_device\_handle of <dmi memory\_channel> : integer
- memory\_device\_load of <dmi memory\_channel> : integer

## dmi memory\_controller\_information

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- memory\_controller\_information <integer> of <dmi> : dmi memory\_controller\_information

- memory\_controller\_information of <dmi> : dmi memory\_controller\_information

#### Properties:

- current\_interleave of <dmi memory\_controller\_information> : integer
- error\_correcting\_capability of <dmi memory\_controller\_information> : integer
- error\_detecting\_method of <dmi memory\_controller\_information> : integer
- length of <dmi memory\_controller\_information> : integer
- maximum\_memory\_module\_size of <dmi memory\_controller\_information> : integer
- memory\_module\_voltage of <dmi memory\_controller\_information> : integer
- number\_of\_associated\_memory\_slots of <dmi memory\_controller\_information> : integer
- supported\_interleave of <dmi memory\_controller\_information> : integer
- supported\_memory\_types of <dmi memory\_controller\_information> : integer
- supported\_speeds of <dmi memory\_controller\_information> : integer

## dmi memory\_device

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

#### Creation:

- memory\_device <integer> of <dmi> : dmi memory\_device
- memory\_device of <dmi> : dmi memory\_device

#### Properties:

- asset\_tag of <dmi memory\_device> : string
- attributes of <dmi memory\_device> : integer
- bank\_locator of <dmi memory\_device> : string



- data\_width of <dmi memory\_device> : integer
- device\_locator of <dmi memory\_device> : string
- device\_set of <dmi memory\_device> : integer
- form\_factor of <dmi memory\_device> : integer
- length of <dmi memory\_device> : integer
- manufacturer of <dmi memory\_device> : string
- memory\_array\_handle of <dmi memory\_device> : integer
- memory\_error\_information\_handle of <dmi memory\_device> : integer
- memory\_type of <dmi memory\_device> : integer
- part\_number of <dmi memory\_device> : string
- serial\_number of <dmi memory\_device> : string
- size of <dmi memory\_device> : integer
- speed of <dmi memory\_device> : integer
- total\_width of <dmi memory\_device> : integer
- type\_detail of <dmi memory\_device> : integer

## dmi memory\_device\_mapped\_address

No documentation exists.

Version	Platforms
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- memory\_device\_mapped\_address <integer> of <dmi> : dmi  
memory\_device\_mapped\_address
- memory\_device\_mapped\_address of <dmi> : dmi memory\_device\_mapped\_address

Properties:

- ending\_address of <dmi memory\_device\_mapped\_address> : integer
- interleave\_position of <dmi memory\_device\_mapped\_address> : integer

- interleaved\_data\_depth of <dmi memory\_device\_mapped\_address> : integer
- length of <dmi memory\_device\_mapped\_address> : integer
- memory\_array\_mapped\_address\_handle of <dmi memory\_device\_mapped\_address> : integer
- memory\_device\_handle of <dmi memory\_device\_mapped\_address> : integer
- partition\_row\_position of <dmi memory\_device\_mapped\_address> : integer
- starting\_address of <dmi memory\_device\_mapped\_address> : integer

## dmi memory\_module\_information

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- memory\_module\_information <integer> of <dmi> : dmi memory\_module\_information
- memory\_module\_information of <dmi> : dmi memory\_module\_information

Properties:

- bank\_connections of <dmi memory\_module\_information> : integer
- current\_memory\_type of <dmi memory\_module\_information> : integer
- current\_speed of <dmi memory\_module\_information> : integer
- enabled\_size of <dmi memory\_module\_information> : integer
- error\_status of <dmi memory\_module\_information> : integer
- installed\_size of <dmi memory\_module\_information> : integer
- length of <dmi memory\_module\_information> : integer
- socket\_designation of <dmi memory\_module\_information> : string

## dmi oem\_strings

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

## dmi on\_board\_devices\_information

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- on\_board\_devices\_information <integer> of <dmi> : dmi on\_board\_devices\_information
- on\_board\_devices\_information of <dmi> : dmi on\_board\_devices\_information

Properties:

- description\_string of <dmi on\_board\_devices\_information> : string
- device\_description <integer> of <dmi on\_board\_devices\_information> : string
- device\_description of <dmi on\_board\_devices\_information> : string
- device\_type <integer> of <dmi on\_board\_devices\_information> : integer
- device\_type of <dmi on\_board\_devices\_information> : integer
- length of <dmi on\_board\_devices\_information> : integer

## dmi onboard\_devices\_extended\_information

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- onboard\_devices\_extended\_information <integer> of <dmi> : dmi onboard\_devices\_extended\_information
- onboard\_devices\_extended\_information of <dmi> : dmi onboard\_devices\_extended\_information

Properties:

- bus\_number of <dmi onboard\_devices\_extended\_information> : integer
- device\_function\_number of <dmi onboard\_devices\_extended\_information> : integer
- device\_type\_instance of <dmi onboard\_devices\_extended\_information> : integer
- length of <dmi onboard\_devices\_extended\_information> : integer
- reference\_designation of <dmi onboard\_devices\_extended\_information> : integer
- segment\_group\_number of <dmi onboard\_devices\_extended\_information> : integer

## **dmi out\_of\_band\_remote\_access**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- out\_of\_band\_remote\_access <integer> of <dmi> : dmi out\_of\_band\_remote\_access
- out\_of\_band\_remote\_access of <dmi> : dmi out\_of\_band\_remote\_access

Properties:

- connections of <dmi out\_of\_band\_remote\_access> : integer
- length of <dmi out\_of\_band\_remote\_access> : integer
- manufacturer\_name of <dmi out\_of\_band\_remote\_access> : string

## **dmi physical\_memory\_array**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- physical\_memory\_array <integer> of <dmi> : dmi physical\_memory\_array
- physical\_memory\_array of <dmi> : dmi physical\_memory\_array

Properties:

- length of <dmi physical\_memory\_array> : integer
- location of <dmi physical\_memory\_array> : integer
- maximum\_capacity of <dmi physical\_memory\_array> : integer
- memory\_error\_correction of <dmi physical\_memory\_array> : integer
- memory\_error\_information\_handle of <dmi physical\_memory\_array> : integer
- number\_of\_memory\_devices of <dmi physical\_memory\_array> : integer
- use of <dmi physical\_memory\_array> : integer

## **dmi port\_connector\_information**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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<b>Version</b>	<b>Platforms</b>
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9.5.7.90	Solaris
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Creation:

- port\_connector\_information <integer> of <dmi> : dmi port\_connector\_information
- port\_connector\_information of <dmi> : dmi port\_connector\_information

Properties:

- external\_connector\_type of <dmi port\_connector\_information> : integer
- external\_reference\_designator of <dmi port\_connector\_information> : string
- internal\_connector\_type of <dmi port\_connector\_information> : integer
- internal\_reference\_designator of <dmi port\_connector\_information> : string
- length of <dmi port\_connector\_information> : integer
- port\_type of <dmi port\_connector\_information> : integer

## **dmi portable\_battery**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- portable\_battery <integer> of <dmi> : dmi portable\_battery
- portable\_battery of <dmi> : dmi portable\_battery

Properties:

- design\_capacity of <dmi portable\_battery> : integer
- design\_capacity\_multiplier of <dmi portable\_battery> : integer
- design\_voltage of <dmi portable\_battery> : integer

- device\_chemistry of <dmi portable\_battery> : integer
- device\_name of <dmi portable\_battery> : string
- length of <dmi portable\_battery> : integer
- location of <dmi portable\_battery> : string
- manufacture\_date of <dmi portable\_battery> : string
- manufacturer of <dmi portable\_battery> : string
- maximum\_error\_in\_battery\_data of <dmi portable\_battery> : integer
- oem\_specific of <dmi portable\_battery> : integer
- sbds\_device\_chemistry of <dmi portable\_battery> : string
- sbds\_manufacture\_date of <dmi portable\_battery> : integer
- sbds\_serial\_number of <dmi portable\_battery> : integer
- sbds\_version\_number of <dmi portable\_battery> : string
- serial\_number of <dmi portable\_battery> : string

## dmi processor\_information

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- processor\_information <integer> of <dmi> : dmi processor\_information
- processor\_information of <dmi> : dmi processor\_information

Properties:

- asset\_tag of <dmi processor\_information> : string
- core\_count of <dmi processor\_information> : integer
- core\_enabled of <dmi processor\_information> : integer
- current\_speed of <dmi processor\_information> : integer
- external\_clock of <dmi processor\_information> : integer

- l1\_cache\_handle of <dmi processor\_information> : integer
- l2\_cache\_handle of <dmi processor\_information> : integer
- l3\_cache\_handle of <dmi processor\_information> : integer
- length of <dmi processor\_information> : integer
- max\_speed of <dmi processor\_information> : integer
- part\_number of <dmi processor\_information> : string
- processor\_characteristics of <dmi processor\_information> : integer
- processor\_family of <dmi processor\_information> : integer
- processor\_family\_2 of <dmi processor\_information> : integer
- processor\_id of <dmi processor\_information> : integer
- processor\_manufacturer of <dmi processor\_information> : string
- processor\_type of <dmi processor\_information> : integer
- processor\_upgrade of <dmi processor\_information> : integer
- processor\_version of <dmi processor\_information> : string
- serial\_number of <dmi processor\_information> : string
- socket\_designation of <dmi processor\_information> : string
- status of <dmi processor\_information> : integer
- thread\_count of <dmi processor\_information> : integer
- voltage of <dmi processor\_information> : integer

## dmi system\_boot\_information

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- system\_boot\_information <integer> of <dmi> : dmi system\_boot\_information
- system\_boot\_information of <dmi> : dmi system\_boot\_information



Properties:

- length of <dmi system\_boot\_information> : integer
- reserved of <dmi system\_boot\_information> : binary\_string
- reserved of <dmi system\_boot\_information> : string

## **dmi system\_configuration\_option**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

## **dmi system\_enclosure\_or\_chassis**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- system\_enclosure\_or\_chassis <integer> of <dmi> : dmi system\_enclosure\_or\_chassis
- system\_enclosure\_or\_chassis of <dmi> : dmi system\_enclosure\_or\_chassis

Properties:

- asset\_tag\_number of <dmi system\_enclosure\_or\_chassis> : string
- bootup\_state of <dmi system\_enclosure\_or\_chassis> : integer
- contained\_element\_count of <dmi system\_enclosure\_or\_chassis> : integer
- contained\_element\_record\_length of <dmi system\_enclosure\_or\_chassis> : integer
- height of <dmi system\_enclosure\_or\_chassis> : integer

- length of <dmi system\_enclosure\_or\_chassis> : integer
- manufacturer of <dmi system\_enclosure\_or\_chassis> : string
- number\_of\_power\_cords of <dmi system\_enclosure\_or\_chassis> : integer
- oem\_defined of <dmi system\_enclosure\_or\_chassis> : integer
- power\_supply\_state of <dmi system\_enclosure\_or\_chassis> : integer
- security\_status of <dmi system\_enclosure\_or\_chassis> : integer
- serial\_number of <dmi system\_enclosure\_or\_chassis> : string
- thermal\_state of <dmi system\_enclosure\_or\_chassis> : integer
- type of <dmi system\_enclosure\_or\_chassis> : integer
- version of <dmi system\_enclosure\_or\_chassis> : string

## dmi system\_information

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- system\_information <integer> of <dmi> : dmi system\_information
- system\_information of <dmi> : dmi system\_information

Properties:

- family of <dmi system\_information> : string
- length of <dmi system\_information> : integer
- manufacturer of <dmi system\_information> : string
- product\_name of <dmi system\_information> : string
- serial\_number of <dmi system\_information> : string
- sku\_number of <dmi system\_information> : string
- uuid of <dmi system\_information> : binary\_string
- uuid of <dmi system\_information> : string

- version of <dmi system\_information> : string
- wake\_up\_type of <dmi system\_information> : integer

## **dmi system\_power\_controls**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- system\_power\_controls <integer> of <dmi> : dmi system\_power\_controls
- system\_power\_controls of <dmi> : dmi system\_power\_controls

Properties:

- length of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_day\_of\_month of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_hour of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_minute of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_month of <dmi system\_power\_controls> : integer
- next\_scheduled\_power\_on\_second of <dmi system\_power\_controls> : integer

## **dmi system\_power\_supply**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
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9.5.7.90	Solaris
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Creation:

- system\_power\_supply <integer> of <dmi> : dmi system\_power\_supply
- system\_power\_supply of <dmi> : dmi system\_power\_supply

#### Properties:

- asset\_tag\_number of <dmi system\_power\_supply> : string
- cooling\_device\_handle of <dmi system\_power\_supply> : integer
- device\_name of <dmi system\_power\_supply> : string
- input\_current\_probe\_handle of <dmi system\_power\_supply> : integer
- input\_voltage\_probe\_handle of <dmi system\_power\_supply> : integer
- length of <dmi system\_power\_supply> : integer
- location of <dmi system\_power\_supply> : string
- manufacturer of <dmi system\_power\_supply> : string
- max\_power\_capacity of <dmi system\_power\_supply> : integer
- model\_part\_number of <dmi system\_power\_supply> : string
- power\_supply\_characteristics of <dmi system\_power\_supply> : integer
- power\_unit\_group of <dmi system\_power\_supply> : integer
- revision\_level of <dmi system\_power\_supply> : string
- serial\_number of <dmi system\_power\_supply> : string

## dmi system\_reset

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- system\_reset <integer> of <dmi> : dmi system\_reset
- system\_reset of <dmi> : dmi system\_reset

Properties:

- capabilities of <dmi system\_reset> : integer
- length of <dmi system\_reset> : integer
- reset\_count of <dmi system\_reset> : integer
- reset\_limit of <dmi system\_reset> : integer
- timeout of <dmi system\_reset> : integer
- timer\_interval of <dmi system\_reset> : integer

## dmi system\_slots

No documentation exists.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- system\_slots <integer> of <dmi> : dmi system\_slots
- system\_slots of <dmi> : dmi system\_slots

Properties:

- bus\_number of <dmi system\_slots> : integer
- current\_usage of <dmi system\_slots> : integer
- device\_function\_number of <dmi system\_slots> : integer
- length of <dmi system\_slots> : integer
- segment\_group\_number of <dmi system\_slots> : integer
- slot\_characteristics\_1 of <dmi system\_slots> : integer
- slot\_characteristics\_2 of <dmi system\_slots> : integer
- slot\_data\_bus\_width of <dmi system\_slots> : integer
- slot\_designation of <dmi system\_slots> : string
- slot\_id of <dmi system\_slots> : integer

- slot\_length of <dmi system\_slots> : integer
- slot\_type of <dmi system\_slots> : integer

## **dmi temperature\_probe**

No documentation exists.

<b>Version</b>	<b>Platforms</b>
----------------	------------------

8.0.584.0	Red Hat, SUSE, Windows
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8.1.535.0	Debian, Ubuntu
-----------	----------------

9.5.7.90	Solaris
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Creation:

- temperature\_probe <integer> of <dmi> : dmi temperature\_probe
- temperature\_probe of <dmi> : dmi temperature\_probe

Properties:

- accuracy of <dmi temperature\_probe> : integer
- description of <dmi temperature\_probe> : string
- length of <dmi temperature\_probe> : integer
- location\_and\_status of <dmi temperature\_probe> : integer
- maximum\_value of <dmi temperature\_probe> : integer
- minimum\_value of <dmi temperature\_probe> : integer
- nominal\_value of <dmi temperature\_probe> : integer
- oem\_defined of <dmi temperature\_probe> : integer
- resolution of <dmi temperature\_probe> : integer
- tolerance of <dmi temperature\_probe> : integer

## **dmi voltage\_probe**

No documentation exists.

Version	Platforms
---------	-----------

8.0.584.0	Red Hat, SUSE, Windows
-----------	------------------------

8.1.535.0	Debian, Ubuntu
-----------	----------------

9.5.7.90	Solaris
----------	---------

Creation:

- voltage\_probe <integer> of <dmi> : dmi voltage\_probe
- voltage\_probe of <dmi> : dmi voltage\_probe

Properties:

- accuracy of <dmi voltage\_probe> : integer
- description of <dmi voltage\_probe> : string
- length of <dmi voltage\_probe> : integer
- location\_and\_status of <dmi voltage\_probe> : integer
- maximum\_value of <dmi voltage\_probe> : integer
- minimum\_value of <dmi voltage\_probe> : integer
- nominal\_value of <dmi voltage\_probe> : integer
- oem\_defined of <dmi voltage\_probe> : integer
- resolution of <dmi voltage\_probe> : integer
- tolerance of <dmi voltage\_probe> : integer

## Files

### datafork

The <datafork> inspectors refer to the data fork of a filesystem object.

Version	Platforms
---------	-----------

8.0.584.0	Mac
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Creation:

- data fork of <file> : data fork

#### Properties:

- length of <datafork> : integer
- size of <datafork> : integer

## device file

These inspector types interrogate Unix-style device files, which contain device drivers or system resources. Unix identifies these resources by a major number and a minor number, both stored as part of a node structure. Typically, the major number identifies the device driver and the minor number identifies the particular device controlled by that driver.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Red Hat, SUSE, Solaris

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

#### Creation:

- device file <filesystem object> : device file
- device file <string> : device file
- device file <string> of <folder> : device file
- device file <symlink> : device file
- device file of <folder> : device file
- <filesystem object> as device file : device file
- <symlink> as device file : device file

#### Properties:

- device type of <device file> : string
- drive of <device file> : filesystem
- filesystem of <device file> : filesystem



- major of <device file> : integer
- minor of <device file> : integer

## domain

Mac OS X defines several file system domains to control access to system resources on multi-user systems. These include the User, Local, Network, Classic and System domains. The domain for a given resource or folder determines its accessibility to the user. For example, while a user-installed font is only available to that user, an administrator-installed font is available to all network users. These inspectors allow folder access to be parceled out according to domain. Note: The "user domain" refers to the root user, not the currently logged in user.

### Version Platforms

8.0.584.0Mac

Creation:

- classic domain : domain
- local domain : domain
- network domain : domain
- on appropriate disk domain : domain
- on system disk domain : domain
- system domain : domain
- user domain : domain

Properties:

- apple extras folder of <domain> : folder
- apple menu items folder of <domain> : folder
- application support folder of <domain> : folder
- applications folder of <domain> : folder
- assistants folder of <domain> : folder
- audio folder of <domain> : folder

- cache folder of <domain> : folder
- carbon folder of <domain> : folder
- chewable items folder of <domain> : folder
- classic folder of <domain> : folder
- color sync folder of <domain> : folder
- colorsync profiles folder of <domain> : folder
- component folder of <domain> : folder
- contextual menu items folder of <domain> : folder
- control panels folder of <domain> : folder
- control strip modules folder of <domain> : folder
- core services folder of <domain> : folder
- current user folder of <domain> : folder
- desktop folder of <domain> : folder
- developer docs folder of <domain> : folder
- developer folder of <domain> : folder
- developer help folder of <domain> : folder
- disabled control panels folder of <domain> : folder
- disabled extensions folder of <domain> : folder
- disabled shutdown items folder of <domain> : folder
- disabled startup items folder of <domain> : folder
- disabled system extensions folder of <domain> : folder
- documentation folder of <domain> : folder
- documents folder of <domain> : folder
- domain library folder of <domain> : folder
- domain top folder of <domain> : folder
- extensions folder of <domain> : folder
- favorites folder of <domain> : folder
- fonts folder of <domain> : folder
- framework <string> of <domain> : folder
- framework folder of <domain> : folder
- help folder of <domain> : folder
- internet plugins folder of <domain> : folder

- iss download folder of <domain> : folder
- kernel extensions folder of <domain> : folder
- locales folder of <domain> : folder
- location manager modules folder of <domain> : folder
- location manager preferences folder of <domain> : folder
- locations folder of <domain> : folder
- macos read me folder of <domain> : folder
- modem scripts folder of <domain> : folder
- preferences folder of <domain> : folder
- printer descriptions folder of <domain> : folder
- printer drivers folder of <domain> : folder
- printers folder of <domain> : folder
- printmonitor documents folder of <domain> : folder
- private framework folder of <domain> : folder
- quicktime folder of <domain> : folder
- receipts folder of <domain> : folder
- scripting additions folder of <domain> : folder
- shared folder of <domain> : folder
- shared libraries folder of <domain> : folder
- shutdown items folder of <domain> : folder
- sound folder of <domain> : folder
- speech folder of <domain> : folder
- startup items folder of <domain> : folder
- system folder of <domain> : folder
- temporary items folder of <domain> : folder
- text encodings folder of <domain> : folder
- themes folder of <domain> : folder
- user temp folder of <domain> : folder
- users folder of <domain> : folder
- utilities folder of <domain> : folder
- voices folder of <domain> : folder
- volume settings folder of <domain> : folder

## **enableable\_file**

No documentation exists.

### **Version Platforms**

8.0.584.0Mac

Creation:

- control panel : enableable\_file
- control panel <string> : enableable\_file
- disabled control panel : enableable\_file
- disabled control panel <string> : enableable\_file
- disabled extension : enableable\_file
- disabled extension <string> : enableable\_file
- disabled shutdown item : enableable\_file
- disabled shutdown item <string> : enableable\_file
- disabled startup item : enableable\_file
- disabled startup item <string> : enableable\_file
- enabled control panel : enableable\_file
- enabled control panel <string> : enableable\_file
- enabled extension : enableable\_file
- enabled extension <string> : enableable\_file
- enabled shutdown item : enableable\_file
- enabled shutdown item <string> : enableable\_file
- enabled startup item : enableable\_file
- enabled startup item <string> : enableable\_file
- extension : enableable\_file
- extension <string> : enableable\_file
- shutdown item : enableable\_file
- shutdown item <string> : enableable\_file
- startup item : enableable\_file
- startup item <string> : enableable\_file

Properties:

- disabled of <enableable\_file> : boolean
- enabled of <enableable\_file> : boolean

## **fifo file**

In Unix systems, a FIFO file is a named pipe that uses the file system as a way to store the pipe name. These inspectors provide access to these named pipes.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Red Hat, SUSE, Solaris
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- fifo file <filesystem object> : fifo file
- fifo file <string> : fifo file
- fifo file <string> of <folder> : fifo file
- fifo file <symlink> : fifo file
- fifo file of <folder> : fifo file
- <filesystem object> as fifo file : fifo file
- <symlink> as fifo file : fifo file

Properties:

- drive of <fifo file> : filesystem
- filesystem of <fifo file> : filesystem

## **file**

For each file in the file system, you can create a corresponding file object and inspect its properties. inspectors are also provided to look at version data of executable files. Note: File systems that do not maintain the creation or last accessed times will often return

the last modification time when queried for the creation or last accessed times or files. Modification times are preserved when files are copied. Thus, it is not uncommon to see a file that appears to have been modified before it was created.

### **Version**

### **Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130 Raspbian

Creation:

- active device file : file
- active device file <string> : file
- binary named file of <folder> : file
- data file of <site profile> : file
- default web browser : file
- descendant of <folder> : file
- download file <string> : file
- download file <string> of <encoding> : file
- file <binary\_string> : file
- file <binary\_string> of <encoding> : file
- file <binary\_string> of <folder> : file
- file <string> : file
- file <string> of <encoding> : file
- file <string> of <folder> : file
- file <symlink> : file
- file ending in <string> of <folder> : file
- file of <folder> : file
- file of <service> : file
- find file <string> of <folder> : file
- hfs file <string> : file
- hfs file <string> of <encoding> : file
- image file of <process> : file
- masthead of <site> : file

- native file <string> : file
- native file <string> of <encoding> : file
- posix file <string> : file
- posix file <string> of <encoding> : file
- relative file <string> of <folder> : file
- relative hfs file <string> of <folder> : file
- relative posix file <string> of <folder> : file
- sibling file <binary\_string> of <filesystem object> : file
- sibling file <string> of <filesystem object> : file
- string named file of <folder> : file
- system file <string> : file
- system ini device file : file
- system ini device file <string> : file
- system x32 file <string> : file
- system x64 file <string> : file
- template file of <site profile> : file
- windows file <string> : file
- x32 file <string> : file
- x32 file <string> of <encoding> : file
- x64 file <string> : file
- x64 file <string> of <encoding> : file
- <filesystem object> as file : file
- <registry key value> as file : file
- <registry key value> as system file : file
- <registry key value> as system x32 file : file
- <registry key value> as system x64 file : file
- <symlink> as file : file

#### Properties:

- alias of <file> : boolean
- aol error of <file> : string
- aol error time of <file> : time

- array of <file> : array
- byte <integer> of <file> : integer
- content of <file> : file content
- creator of <file> : file signature
- data fork of <file> : datafork
- dictionary of <file> : dictionary
- drive of <file> : volume
- executable file format of <file> : string
- file version of <file> : version
- filesystem of <file> : filesystem
- filesystem of <file> : volume
- first raw version block of <file> : file version block
- json of <file> : json value
- key <string> of <file> : string
- length of <file> : integer
- line <integer> of <file> : file line
- line containing <string> of <file> : file line
- line of <file> : file line
- line starting with <string> of <file> : file line
- locked content of <file> : file content
- locked key <string> of <file> : string
- locked line <integer> of <file> : file line
- locked line containing <string> of <file> : file line
- locked line of <file> : file line
- locked line starting with <string> of <file> : file line
- locked of <file> : boolean
- locked section <string> of <file> : file section
- md5 of <file> : string
- only raw version block of <file> : file version block
- only version block of <file> : file version block
- pem encoded certificate of <file> : x509 certificate
- product version of <file> : version



- raw file version of <file> : version
- raw product version of <file> : version
- raw version block <integer> of <file> : file version block
- raw version block <string> of <file> : file version block
- raw version block of <file> : file version block
- raw version of <file> : version
- resource fork of <file> : resfork
- section <string> of <file> : file section
- security descriptor of <file> : security descriptor
- sha1 of <file> : string
- sha224 of <file> : string
- sha256 of <file> : string
- sha2\_224 of <file> : string
- sha2\_256 of <file> : string
- sha2\_384 of <file> : string
- sha2\_512 of <file> : string
- sha384 of <file> : string
- sha512 of <file> : string
- shortcut of <file> : file shortcut
- size of <file> : integer
- sqlite database of <file> : sqlite database
- stationery of <file> : boolean
- type of <file> : file type
- variable of <file> : string
- version <integer> of <file> : version
- version block <integer> of <file> : file version block
- version block <string> of <file> : file version block
- version block of <file> : file version block
- version of <file> : version
- visible of <file> : boolean
- volume of <file> : volume
- windows checksum of <file> : integer

- xml document of <file> : xml dom document

Casts:

- <file> as string : string

## file content

Content objects can be constructed from file objects to inspect their contents.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- content of <file> : file content
- locked content of <file> : file content

Casts:

- <file content> as lowercase : file content
- <file content> as uppercase : file content

Operators:

- <file content> contains <string> : boolean

## file line

A <file line> object produces strings from a text file.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

**Version****Platforms**

9.5.13.130Raspbian

Creation:

- line <integer> of <file> : file line
- line containing <string> of <file> : file line
- line of <file> : file line
- line starting with <string> of <file> : file line
- locked line <integer> of <file> : file line
- locked line containing <string> of <file> : file line
- locked line of <file> : file line
- locked line starting with <string> of <file> : file line

Properties:

- line number of <file line> : integer
- next line of <file line> : file line
- previous line of <file line> : file line

**file rawline**

A <file rawline> object produces strings from a text file, ignoring encoding errors.

**Version****Platforms**

10.0.0.133AIX, Debian, Mac, Raspbian, Red Hat, SUSE, Solaris, Ubuntu, Windows

Creation:

- locked rawline <integer> of <file> : file rawline
- locked rawline containing <string> of <file> : file rawline
- locked rawline of <file> : file rawline
- locked rawline starting with <string> of <file> : file rawline
- rawline <integer> of <file> : file rawline
- rawline containing <string> of <file> : file rawline
- rawline of <file> : file rawline

- rawline starting with <string> of <file> : file rawline

Properties:

- next rawline of <file rawline> : file rawline
- previous rawline of <file rawline> : file rawline
- rawline number of <file rawline> : integer

## file section

Many programs and utilities store their settings in 'ini' files. This object is designed to access these settings. An 'ini' file is composed of zero or more named sections, each with zero or more keys. Each key is identified by name and has a string value.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- locked section <string> of <file> : file section
- section <string> of <file> : file section

Properties:

- key <string> of <file section> : string

## file shortcut

Shortcuts to files can be constructed in the file system. The shortcut contains some additional properties that can be inspected.

### Version Platforms

8.0.584.0Windows

Creation:

- shortcut of <file> : file shortcut

#### Properties:

- argument string of <file shortcut> : string
- icon index of <file shortcut> : integer
- icon pathname of <file shortcut> : string
- pathname of <file shortcut> : string
- start in pathname of <file shortcut> : string

## file signature

The <file signature> inspectors provide access to each of the four character file signatures associated with some types of files.

### Version Platforms

8.0.584.0Mac

#### Creation:

- creator of <bundle> : file signature
- creator of <file> : file signature
- file signature <string> : file signature

#### Operators:

- <file signature> = <file signature> : boolean

## file type

The <file type> inspectors provide access to the four character file type associated with some types of files.

### Version Platforms

8.0.584.0Mac

**Creation:**

- file type <string> : file type
- type of <bundle> : file type
- type of <file> : file type

**Operators:**

- <file type> = <file type> : boolean

**file version block**

You can inspect the version blocks of a file. There may be several language-specific version blocks. Version blocks contain version and name information in a human readable form for the specified language. This is the information that Windows displays in the file properties dialog. This technique uses string values and has a limited array of comparators. For better speed, utility and compactness see the version object.

**Version Platforms**

8.0.584.0Windows

**Creation:**

- first raw version block of <file> : file version block
- only raw version block of <file> : file version block
- only version block of <file> : file version block
- raw version block <integer> of <file> : file version block
- raw version block <string> of <file> : file version block
- raw version block of <file> : file version block
- version block <integer> of <file> : file version block
- version block <string> of <file> : file version block
- version block of <file> : file version block

**Properties:**

- codepage of <file version block> : string
- id of <file version block> : string
- language of <file version block> : string
- value <string> of <file version block> : string

## filesystem

The filesystem object can be used to inspect various aspects of mounted file systems, including the format of the file system. Here are some of the possible format types: affsext, ext2, ext2\_oldhpfsisominix, minix\_30, minix2, minix2\_30 msdos ncpnfsprocsmbxbenixsysv4, sysv2cohufsxia.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	AIX, HP-UX, Red Hat, SUSE, Solaris
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8.1.535.0	Debian, Ubuntu
-----------	----------------

9.5.13.130	Raspbian
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Creation:

- drive : filesystem
- drive <string> : filesystem
- drive of <device file> : filesystem
- drive of <fifo file> : filesystem
- drive of <file> : filesystem
- drive of <folder> : filesystem
- drive of <socket file> : filesystem
- drive of <symlink> : filesystem
- filesystem : filesystem
- filesystem <string> : filesystem
- filesystem of <device file> : filesystem
- filesystem of <fifo file> : filesystem
- filesystem of <file> : filesystem
- filesystem of <folder> : filesystem

- filesystem of <socket file> : filesystem
- filesystem of <symlink> : filesystem

#### Properties:

- block size of <filesystem> : integer
- device name of <filesystem> : string
- file count of <filesystem> : integer
- filesystem type of <filesystem> : string
- free file count of <filesystem> : integer
- free percent of <filesystem> : integer
- free space of <filesystem> : integer
- fstype of <filesystem> : string
- logical volume of <filesystem> : logical volume
- mount option of <filesystem> : string
- mount point of <filesystem> : string
- name of <filesystem> : string
- size of <filesystem> : integer
- total space of <filesystem> : integer
- type of <filesystem> : string
- used file count of <filesystem> : integer
- used percent of <filesystem> : integer
- used space of <filesystem> : integer
- uuid of <filesystem> : string
- volume of <filesystem> : string

## filesystem object

The <filesystem object> inspectors provide handles for the various objects available in the file system.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows



**Version****Platforms**

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- application : filesystem object
- application <string> : filesystem object
- application of <folder> : filesystem object
- find item <string> of <folder> : filesystem object
- hfs item <string> : filesystem object
- hfs relative item <string> of <folder> : filesystem object
- item <string> : filesystem object
- item <string> of <folder> : filesystem object
- item ending in <string> of <folder> : filesystem object
- item of <folder> : filesystem object
- posix item <string> : filesystem object
- posix relative item <string> of <folder> : filesystem object
- regapp : filesystem object
- relative item <string> of <folder> : filesystem object

Properties:

- accessed time of <filesystem object> : time
- ancestor of <filesystem object> : folder
- archive of <filesystem object> : boolean
- backup time of <filesystem object> : time
- binary location of <filesystem object> : binary\_string
- binary name of <filesystem object> : binary\_string
- binary pathname of <filesystem object> : binary\_string
- bundle version of <filesystem object> : version
- change time of <filesystem object> : time
- compressed of <filesystem object> : boolean
- creation time of <filesystem object> : time

- device file <filesystem object> : device file
- drive of <filesystem object> : drive
- fifo file <filesystem object> : fifo file
- gid of <filesystem object> : integer
- group execute of <filesystem object> : boolean
- group mask of <filesystem object> : integer
- group name of <filesystem object> : string
- group read of <filesystem object> : boolean
- group write of <filesystem object> : boolean
- has extended acl of <filesystem object> : boolean
- hfs path of <filesystem object> : string
- hidden of <filesystem object> : boolean
- link count of <filesystem object> : integer
- location of <filesystem object> : folder
- location of <filesystem object> : string
- mode of <filesystem object> : mode
- modification time of <filesystem object> : time
- name of <filesystem object> : string
- normal of <filesystem object> : boolean
- offline of <filesystem object> : boolean
- other execute of <filesystem object> : boolean
- other mask of <filesystem object> : integer
- other read of <filesystem object> : boolean
- other write of <filesystem object> : boolean
- parent folder of <filesystem object> : folder
- pathname of <filesystem object> : string
- posix path of <filesystem object> : string
- readonly of <filesystem object> : boolean
- setgid of <filesystem object> : boolean
- setuid of <filesystem object> : boolean
- sibling file <binary\_string> of <filesystem object> : file
- sibling file <string> of <filesystem object> : file

- sibling folder <string> of <filesystem object> : folder
- sibling item <string> of <filesystem object> : filesystem
- object socket file <filesystem object> : socket file
- symlink <filesystem object> : symlink
- system of <filesystem object> : boolean
- temporary of <filesystem object> : boolean
- uid of <filesystem object> : integer
- user execute of <filesystem object> : boolean
- user mask of <filesystem object> : integer
- user name of <filesystem object> : string
- user read of <filesystem object> : boolean
- user write of <filesystem object> : boolean
- version of <filesystem object> : version

#### Casts:

- <filesystem object> as device file : device file
- <filesystem object> as fifo file : fifo file
- <filesystem object> as file : file
- <filesystem object> as folder : folder
- <filesystem object> as socket file : socket file
- <filesystem object> as string : string
- <filesystem object> as symlink : symlink

#### Operators:

- <filesystem object> = <filesystem object> : boolean

## folder

For every folder that exists in the file system, you can create a folder object. These inspectors allow you to examine dozens of properties of folder objects. On the Macintosh, there are dozens of specialized folders; access to them depends on the domain. If the domain is not specified, it defaults to the system domain.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- ancestor of <filesystem object> : folder
- ancestor of <symlink> : folder
- apple extras folder : folder
- apple extras folder of <domain> : folder
- apple menu items folder : folder
- apple menu items folder of <domain> : folder
- application folder <string> of <registry key> : folder
- application folder <string> of <registry> : folder
- application folder of <registry key> : folder
- application support folder : folder
- application support folder of <domain> : folder
- applications folder : folder
- applications folder of <domain> : folder
- assistants folder : folder
- assistants folder of <domain> : folder
- audio folder : folder
- audio folder of <domain> : folder
- backup folder of <palm device> : folder
- cache folder : folder
- cache folder of <domain> : folder
- carbon folder : folder
- carbon folder of <domain> : folder
- chewable items folder : folder
- chewable items folder of <domain> : folder
- classic folder : folder
- classic folder of <domain> : folder

- client folder of <site> : folder
- color sync folder : folder
- color sync folder of <domain> : folder
- colorsync profiles folder : folder
- colorsync profiles folder of <domain> : folder
- component folder : folder
- component folder of <domain> : folder
- contextual menu items folder : folder
- contextual menu items folder of <domain> : folder
- control panels folder : folder
- control panels folder of <domain> : folder
- control strip modules folder : folder
- control strip modules folder of <domain> : folder
- core services folder : folder
- core services folder of <domain> : folder
- csidl folder <integer> : folder
- current user folder : folder
- current user folder of <domain> : folder
- data folder of <client> : folder
- desktop folder : folder
- desktop folder of <domain> : folder
- developer docs folder : folder
- developer docs folder of <domain> : folder
- developer folder : folder
- developer folder of <domain> : folder
- developer help folder : folder
- developer help folder of <domain> : folder
- disabled control panels folder : folder
- disabled control panels folder of <domain> : folder
- disabled extensions folder : folder
- disabled extensions folder of <domain> : folder
- disabled shutdown items folder : folder

- disabled shutdown items folder of <domain> : folder
- disabled startup items folder : folder
- disabled startup items folder of <domain> : folder
- disabled system extensions folder : folder
- disabled system extensions folder of <domain> : folder
- documentation folder : folder
- documentation folder of <domain> : folder
- documents folder : folder
- documents folder of <domain> : folder
- domain library folder : folder
- domain library folder of <domain> : folder
- domain top folder : folder
- domain top folder of <domain> : folder
- download folder : folder
- download folder of <encoding> : folder
- extensions folder : folder
- extensions folder of <domain> : folder
- favorites folder : folder
- favorites folder of <domain> : folder
- folder <binary\_string> : folder
- folder <binary\_string> of <encoding> : folder
- folder <string> : folder
- folder <string> of <drive> : folder
- folder <string> of <encoding> : folder
- folder <symlink> : folder
- folder of <hotsync user> : folder
- folder of <palm device> : folder
- folder of <site> : folder
- fonts folder : folder
- fonts folder of <domain> : folder
- framework <string> : folder
- framework <string> of <domain> : folder

- framework folder : folder
- framework folder of <domain> : folder
- help folder : folder
- help folder of <domain> : folder
- hfs folder <string> : folder
- hfs folder <string> of <encoding> : folder
- home directory folder of <user> : folder
- home directory of <user> : folder
- install folder <integer> : folder
- install folder of <palm device> : folder
- installed path of <winrt package> : folder
- internet plugins folder : folder
- internet plugins folder of <domain> : folder
- iss download folder : folder
- iss download folder of <domain> : folder
- kernel extensions folder : folder
- kernel extensions folder of <domain> : folder
- locales folder : folder
- locales folder of <domain> : folder
- location manager modules folder : folder
- location manager modules folder of <domain> : folder
- location manager preferences folder : folder
- location manager preferences folder of <domain> : folder
- location of <filesystem object> : folder
- locations folder : folder
- locations folder of <domain> : folder
- macos read me folder : folder
- macos read me folder of <domain> : folder
- modem scripts folder : folder
- modem scripts folder of <domain> : folder
- native folder <string> : folder
- native folder <string> of <encoding> : folder

- native program files folder : folder
- native system folder : folder
- parent folder of <filesystem object> : folder
- parent folder of <symlink> : folder
- posix folder <string> : folder
- posix folder <string> of <encoding> : folder
- preferences folder : folder
- preferences folder of <domain> : folder
- printer descriptions folder : folder
- printer descriptions folder of <domain> : folder
- printer drivers folder : folder
- printer drivers folder of <domain> : folder
- printers folder : folder
- printers folder of <domain> : folder
- printmonitor documents folder : folder
- printmonitor documents folder of <domain> : folder
- private framework folder : folder
- private framework folder of <domain> : folder
- program files folder : folder
- program files x32 folder : folder
- program files x64 folder : folder
- quicktime folder : folder
- quicktime folder of <domain> : folder
- receipts folder : folder
- receipts folder of <domain> : folder
- root folder : folder
- root folder of <drive> : folder
- scripting additions folder : folder
- scripting additions folder of <domain> : folder
- shared folder : folder
- shared folder of <domain> : folder
- shared libraries folder : folder



- shared libraries folder of <domain> : folder
- shutdown items folder : folder
- shutdown items folder of <domain> : folder
- sibling folder <string> of <filesystem object> : folder
- sound folder : folder
- sound folder of <domain> : folder
- speech folder : folder
- speech folder of <domain> : folder
- startup items folder : folder
- startup items folder of <domain> : folder
- storage folder of <client> : folder
- system folder : folder
- system folder of <domain> : folder
- system wow64 folder : folder
- system x32 folder : folder
- system x64 folder : folder
- temporary items folder : folder
- temporary items folder of <domain> : folder
- text encodings folder : folder
- text encodings folder of <domain> : folder
- themes folder : folder
- themes folder of <domain> : folder
- update folder of <palm device> : folder
- user temp folder : folder
- user temp folder of <domain> : folder
- users folder : folder
- users folder of <domain> : folder
- utilities folder : folder
- utilities folder of <domain> : folder
- voices folder : folder
- voices folder of <domain> : folder
- volume settings folder : folder

- volume settings folder of <domain> : folder
- windows folder : folder
- x32 folder <string> : folder
- x32 folder <string> of <encoding> : folder
- x64 folder <string> : folder
- x64 folder <string> of <encoding> : folder
- <filesystem object> as folder : folder
- <registry key value> as folder : folder
- <symlink> as folder : folder

#### Properties:

- application <binary\_string> of <folder> : application
- application <string> of <folder> : application
- application of <folder> : application
- application of <folder> : filesystem object
- binary named file of <folder> : file
- binary named folder of <folder> : folder
- bundle of <folder> : bundle
- bundle version of <folder> : version
- descendant folder of <folder> : folder
- descendant of <folder> : file
- device file <string> of <folder> : device file
- device file of <folder> : device file
- drive of <folder> : filesystem
- drive of <folder> : volume
- fifo file <string> of <folder> : fifo file
- fifo file of <folder> : fifo file
- file <binary\_string> of <folder> : file
- file <string> of <folder> : file
- file ending in <string> of <folder> : file
- file of <folder> : file
- filesystem of <folder> : filesystem

- filesystem of <folder> : volume
- find file <string> of <folder> : file
- find folder <string> of <folder> : folder
- find item <string> of <folder> : filesystem object
- folder <binary\_string> of <folder> : folder
- folder <string> of <folder> : folder
- folder ending in <string> of <folder> : folder
- folder of <folder> : folder
- hfs relative item <string> of <folder> : filesystem object
- item <string> of <folder> : filesystem object
- item ending in <string> of <folder> : filesystem object
- item of <folder> : filesystem object
- posix relative item <string> of <folder> : filesystem object
- relative file <string> of <folder> : file
- relative folder <binary\_string> of <folder> : folder
- relative folder <string> of <folder> : folder
- relative hfs file <string> of <folder> : file
- relative hfs folder <string> of <folder> : folder
- relative item <string> of <folder> : filesystem object
- relative posix file <string> of <folder> : file
- relative posix folder <string> of <folder> : folder
- security descriptor of <folder> : security descriptor
- socket file <string> of <folder> : socket file
- socket file of <folder> : socket file
- string named file of <folder> : file
- string named folder of <folder> : folder
- symlink <binary\_string> of <folder> : symlink
- symlink <string> of <folder> : symlink
- symlink of <folder> : symlink
- version of <folder> : version
- volume of <folder> : volume

## mode

The <mode> inspector returns file type information and permissions. These are the possible values of mode:

- S\_IFMT 170000 bitmask for the file type bitfields
- S\_IFSOCK 140000 socket
- S\_IFLNK 120000 symbolic link
- S\_IFREG 100000 regular file
- S\_IFBLK 060000 block device
- S\_IFDIR 040000 directory
- S\_IFCHR 020000 character device
- S\_IFIFO 010000 fifo
- S\_ISUID 004000 set UID bit
- S\_ISGID 002000 set GID bit
- S\_ISVTX 001000 sticky bit
- S\_IRWXU 000700 mask for file owner permissions
- S\_IRUSR 000400 owner has read permission
- S\_IWUSR 000200 owner has write permission
- S\_IXUSR 000100 owner has execute permission
- S\_IRWXG 000070 mask for group permissions
- S\_IRGRP 000040 group has read permission
- S\_IWGRP 000020 group has write permission
- S\_IXGRP 000010 group has execute permission
- S\_IRWXO 000007 mask for permissions for others (not in group)
- S\_IROTH 000004 others have read permission
- S\_IWOTH 000002 others have write permission
- S\_IXOTH 000001 others have execute permission.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	AIX, HP-UX, Red Hat, SUSE, Solaris
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8.1.535.0	Debian, Ubuntu
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9.5.13.130	Raspbian
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Creation:

- mode of <filesystem object> : mode

Properties:

- group mask of <mode> : mode\_mask
- other mask of <mode> : mode\_mask
- setgid of <mode> : boolean
- setuid of <mode> : boolean
- sticky of <mode> : boolean
- user mask of <mode> : mode\_mask

Casts:

- <mode> as octal string : string
- <mode> as string : string

## mode\_mask

The <mode\_mask> inspector is a differently formatted version of the mode, created by shifting the key information down to the low three bits.

Version	Platforms
8.0.584.0	AIX, HP-UX, Red Hat, SUSE, Solaris
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- group mask of <mode> : mode\_mask
- other mask of <mode> : mode\_mask
- user mask of <mode> : mode\_mask

Properties:

- execute of <mode\_mask> : boolean
- read of <mode\_mask> : boolean
- write of <mode\_mask> : boolean

Casts:

- <mode\_mask> as integer : integer
- <mode\_mask> as string : string

## resfork

The <resfork> inspectors refer to the resource fork of a filesystem object.

## Version Platforms

8.0.584.0Mac

Creation:

- resource fork of <file> : resfork

Properties:

- length of <resfork> : integer
- size of <resfork> : integer

## swap

This object lets you inspect the properties of your swap space.

Version	Platforms
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8.0.584.0	AIX, HP-UX, Red Hat, SUSE
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8.1.535.0	Debian, Ubuntu
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9.0.586.0	Solaris
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Creation:

- swap : swap

Properties:

- free amount of <swap> : integer
- size of <swap> : integer
- total amount of <swap> : integer
- used amount of <swap> : integer

## symlink

Symlinks, or symbolic links, are the Unix version of shortcut files (pointers to other files). inspectors can analyze the file objects (files and folders) that symlinks point to by using the

standard file inspectors. The symlink inspectors, on the other hand, allow you to analyze the properties of a symlink itself, not just the underlying file. There are many properties that symlinks have in common with files, such as name, pathname, parent folder, and more. In addition, a symlink has a value corresponding to the file object it points to. You can also determine if the file is available or not.

<b>Version</b>	<b>Platforms</b>
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8.0.584.0	AIX, HP-UX, Red Hat, SUSE, Solaris
8.1.535.0	Debian, Ubuntu

Creation:

- symlink <binary\_string> : symlink
- symlink <binary\_string> of <encoding> : symlink
- symlink <binary\_string> of <folder> : symlink
- symlink <filesystem object> : symlink
- symlink <string> : symlink
- symlink <string> of <encoding> : symlink
- symlink <string> of <folder> : symlink
- symlink of <folder> : symlink
- <filesystem object> as symlink : symlink

Properties:

- accessed time of <symlink> : time
- ancestor of <symlink> : folder
- change time of <symlink> : time
- device file <symlink> : device file
- drive of <symlink> : filesystem
- fifo file <symlink> : fifo file
- file <symlink> : file
- filesystem of <symlink> : filesystem
- folder <symlink> : folder
- gid of <symlink> : integer

- group name of <symlink> : string
- link count of <symlink> : integer
- location of <symlink> : string
- modification time of <symlink> : time
- name of <symlink> : string
- parent folder of <symlink> : folder
- pathname of <symlink> : string
- socket file <symlink> : socket
- file symlink <symlink> : symlink
- uid of <symlink> : integer
- user name of <symlink> : string
- value accessible of <symlink> : boolean
- value of <symlink> : string

#### Casts:

- <symlink> as binary\_string : binary\_string
- <symlink> as device file : device file
- <symlink> as fifo file : fifo file
- <symlink> as file : file
- <symlink> as folder : folder
- <symlink> as socket file : socket file
- <symlink> as string : string
- <symlink> as symlink : symlink

## volume

The <volume> inspectors refer to the mounted drive volumes.

### Version Platforms

8.0.584.0Mac

Creation:

- drive : volume drive <integer> : volume



- drive <string> : volume
- drive of <file> : volume
- drive of <folder> : volume
- filesystem : volume
- filesystem <integer> : volume
- filesystem <string> : volume
- filesystem of <file> : volume
- filesystem of <folder> : volume
- volume : volume
- volume <integer> : volume
- volume <string> : volume
- volume of <file> : volume
- volume of <folder> : volume

#### Properties:

- allocation block count of <volume> : integer
- directory count of <volume> : integer
- file count of <volume> : integer
- flag of <volume> : integer
- free percent of <volume> : integer
- free space of <volume> : integer
- init date of <volume> : time
- modification time of <volume> : time
- name of <volume> : string
- size of <volume> : integer
- total space of <volume> : integer
- type of <volume> : string
- used percent of <volume> : integer
- used space of <volume> : integer

#### Operators:

- <volume> = <volume> : boolean

## drive

The <drive> object is available to inspect these aspects of the file system.

### Version Platforms

8.0.584.0Windows

Creation:

- drive : drive
- drive <string> : drive
- drive of <filesystem object> : drive

Properties:

- file system type of <drive> : string
- file\_supports\_encryption of <drive> : boolean
- file\_supports\_object\_ids of <drive> : boolean
- file\_supports\_reparse\_points of <drive> : boolean
- file\_supports\_sparse\_files of <drive> : boolean
- file\_volume\_quotas of <drive> : boolean
- folder <string> of <drive> : folder
- free space of <drive> : integer
- fs\_case\_is\_preserved of <drive> : boolean
- fs\_case\_sensitive of <drive> : boolean
- fs\_file\_compression of <drive> : boolean
- fs\_persistent\_acls of <drive> : boolean
- fs\_unicode\_stored\_on\_disk of <drive> : boolean
- fs\_vol\_is\_compressed of <drive> : boolean
- name of <drive> : string
- numeric type of <drive> : integer
- root folder of <drive> : folder

- total space of <drive> : integer
- type of <drive> : string
- volume of <drive> : string

## logical volume

A logical volume consists of an array of identically sized logical partitions. The partition size of a logical volume is determined by the volume group that contains it, and is the same as the volume group's physical partition size. Contiguous logical partitions within a logical volume may map to discontinuous physical partitions, possibly distributed across multiple physical volumes. A logical volume may be configured so that its logical partitions are mirrored to protect data from hardware failures. Mirroring may be configured so that each logical partition maps to either 2 or 3 physical partition mirrors.

### Version Platforms

8.0.584.0AIX

Creation:

- logical volume <string> of <volume group> : logical volume
- logical volume of <filesystem> : logical volume
- logical volume of <volume group> : logical volume

Properties:

- label of <logical volume> : string
- maximum partition count of <logical volume> : integer
- minor number of <logical volume> : integer
- mirror count of <logical volume> : integer
- name of <logical volume> : string
- partition count of <logical volume> : integer
- volume group of <logical volume> : volume group

Casts:

- <logical volume> as string : string

## logical volume manager

On AIX, the logical volume manager provides a flexible means of allocating disk space using volume groups, logical volumes, and physical volumes. A volume group is a collection of one or more physical volumes and a logical volume is an abstraction representing a pool of disk space. The disk space assigned to a logical volume appears contiguous to the user, but it may actually be distributed across one or more physical volumes within a single volume group.

### Version Platforms

8.0.584.0AIX

Creation:

- logical volume manager : logical volume manager

Properties:

- volume group <string> of <logical volume manager> : volume group
- volume group of <logical volume manager> : volume group

## volume group

On AIX systems, physical disk volumes are organized into volume groups. The partition size of a physical volume is determined by the volume group that it belongs to. If multiple physical volumes belong to the same volume group, then they must all have the same partition size. A typical partition size might be 16 or 32 megabytes.

### Version Platforms

8.0.584.0AIX

Creation:

- volume group <string> of <logical volume manager> : volume group

- volume group of <logical volume manager> : volume group
- volume group of <logical volume> : volume group

#### Properties:

- free partition count of <volume group> : integer
- logical volume <string> of <volume group> : logical volume
- logical volume of <volume group> : logical volume
- major number of <volume group> : integer
- name of <volume group> : string
- partition size of <volume group> : integer

#### Casts:

- <volume group> as string : string

## Firewall

### firewall

The Firewall inspectors allow you to view the settings of the Windows Firewall on Windows Clients. By inspecting the firewall properties, you can determine which applications have access to unsolicited traffic and how the firewall is configured for various subsets of your network. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the MSDN site (<http://msdn.microsoft.com/library/>).

#### Version Platforms

8.0.584.0Windows

Creation:

- firewall : firewall

#### Properties:

- current profile type of <firewall> : firewall profile type
- local policy modify state of <firewall> : firewall local policy modify state
- local policy of <firewall> : firewall policy
- profile type of <firewall> : firewall profile type
- rule group currently enabled <string> of <firewall> : boolean
- rule of <firewall> : firewall rule
- service restriction of <firewall> : firewall service restriction

## firewall action

The firewall action inspectors provide wrappers around the Windows Vista Firewall API. These are Vista-only inspectors.

### Version Platforms

8.0.584.0Windows

Creation:

- action of <firewall rule> : firewall action
- allow firewall action : firewall action
- block firewall action : firewall action
- firewall action <integer> : firewall action

Operators:

- <firewall action> = <firewall action> : boolean

## firewall authorized application

The <firewall authorized application> inspectors apply to applications that are authorized to exchange traffic through the Windows Firewall. These properties correspond to the INetFwAuthorizedApplication interface in the Windows Firewall API. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

**Version Platforms**

8.0.584.0Windows

Creation:

- authorized application of <firewall profile> : firewall authorized application

Properties:

- enabled of <firewall authorized application> : boolean
- ip version of <firewall authorized application> : ip version
- name of <firewall authorized application> : string
- process image file name of <firewall authorized application> : string
- remote addresses of <firewall authorized application> : string
- scope of <firewall authorized application> : firewall scope

**firewall icmp settings**

The <firewall icmp settings> inspectors provide access to the settings controlling Internet Control Message Protocol (ICMP) packets. These properties correspond to the INetFwIcmpSettings interface in the Windows Firewall API. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

**Version Platforms**

8.0.584.0Windows

Creation:

- icmp settings of <firewall profile> : firewall icmp settings

Properties:

- allow inbound echo request of <firewall icmp settings> : boolean
- allow inbound mask request of <firewall icmp settings> : boolean
- allow inbound router request of <firewall icmp settings> : boolean

- allow inbound timestamp request of <firewall icmp settings> : boolean
- allow outbound destination unreachable of <firewall icmp settings> : boolean
- allow outbound packet too big of <firewall icmp settings> : boolean
- allow outbound parameter problem of <firewall icmp settings> : boolean
- allow outbound source quench of <firewall icmp settings> : boolean
- allow outbound time exceeded of <firewall icmp settings> : boolean
- allow redirect of <firewall icmp settings> : boolean

## firewall local policy modify state

The <firewall local policy modify state> inspectors provide a wrapper for the Windows Firewall Policy Modification State. They are Vista-only. On a non-Vista machine, they return no results. For more information see the MSDN Library reference to NET\_FW\_MODIFY\_STATE at <http://msdn.microsoft.com/library/>.

### Version Platforms

8.0.584.0Windows

Creation:

- firewall local policy modify state <integer> : firewall local policy modify state
- gp override firewall local policy modify state : firewall local policy modify state
- inbound blocked firewall local policy modify state : firewall local policy modify state
- local policy modify state of <firewall> : firewall local policy modify state
- ok firewall local policy modify state : firewall local policy modify state

Operators:

- <firewall local policy modify state> = <firewall local policy modify state> : boolean

## firewall open port

The <firewall open port> inspectors provide access to the properties of a port that has been opened in the Windows Firewall. These properties correspond to the INetFwOpenPort interface in the Windows Firewall API. The Windows Firewall is supported on Windows



XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

### Version Platforms

8.0.584.0Windows

Creation:

- globally open port of <firewall profile> : firewall open port
- globally open port of <firewall service> : firewall open port

Properties:

- built in of <firewall open port> : boolean
- enabled of <firewall open port> : boolean
- ip version of <firewall open port> : ip version
- name of <firewall open port> : string
- port of <firewall open port> : integer
- protocol of <firewall open port> : internet protocol
- remote addresses of <firewall open port> : string
- scope of <firewall open port> : firewall scope

## firewall policy

The <firewall policy> inspectors provide access to the local, current, domain and standard firewall policies. These properties correspond to the INetFwPolicy interface in the Windows Firewall API. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

### Version Platforms

8.0.584.0Windows

Creation:

- local policy of <firewall> : firewall policy

Properties:

- current profile of <firewall policy> : firewall profile
- domain profile of <firewall policy> : firewall profile
- private profile of <firewall policy> : firewall profile
- profile of <firewall policy> : firewall profile
- public profile of <firewall policy> : firewall profile
- standard profile of <firewall policy> : firewall profile

## firewall profile

The <firewall profile> inspectors provide access to the firewall profile. These properties correspond to the INetFwProfile interface in the Windows Firewall API. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

### Version Platforms

8.0.584.0Windows

Creation:

- current profile of <firewall policy> : firewall profile
- domain profile of <firewall policy> : firewall profile
- private profile of <firewall policy> : firewall profile
- profile of <firewall policy> : firewall profile
- public profile of <firewall policy> : firewall profile
- standard profile of <firewall policy> : firewall profile

Properties:

- authorized application of <firewall profile> : firewall authorized application
- exceptions allowed of <firewall profile> : boolean
- excluded interface of <firewall profile> : string
- firewall enabled of <firewall profile> : boolean
- globally open port of <firewall profile> : firewall open port
- icmp settings of <firewall profile> : firewall icmp settings

- inbound connections allowed of <firewall profile> : boolean
- notifications disabled of <firewall profile> : boolean
- outbound connections allowed of <firewall profile> : boolean
- remote admin settings of <firewall profile> : firewall remote admin settings
- rule group enabled <string> of <firewall profile> : boolean
- service of <firewall profile> : firewall service
- type of <firewall profile> : firewall profile type
- unicast responses to multicast broadcast disabled of <firewall profile> : boolean

## firewall profile type

The <firewall profile type> inspectors provide access to the firewall profile type. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

### Version Platforms

8.0.584.0Windows

Creation:

- current firewall profile type : firewall profile type
- current profile type of <firewall> : firewall profile type
- domain firewall profile type : firewall profile type
- firewall profile type <integer> : firewall profile type
- private firewall profile type : firewall profile type
- profile type of <firewall> : firewall profile type
- public firewall profile type : firewall profile type
- standard firewall profile type : firewall profile type
- type of <firewall profile> : firewall profile type

Casts:

- <firewall profile type> as string : string

Operators:

- <firewall profile type> = <firewall profile type> : boolean

## firewall remote admin settings

No documentation exists.

### Version Platforms

8.0.584.0Windows

Creation:

- remote admin settings of <firewall profile> : firewall remote admin settings

## firewall rule

The <firewall rule> inspectors provide a wrapper for the Windows Firewall Rule. They are Vista-only. On a non-Vista machine, they return no results. For more information, see the MSDN library for INetFwRule at <http://msdn.microsoft.com/library/>.

### Version Platforms

8.0.584.0Windows

Creation:

- rule of <firewall service restriction> : firewall rule
- rule of <firewall> : firewall rule

Properties:

- action of <firewall rule> : firewall action
- application name of <firewall rule> : string
- currently active of <firewall rule> : boolean
- description of <firewall rule> : string
- edge traversal allowed of <firewall rule> : boolean
- enabled of <firewall rule> : boolean
- grouping of <firewall rule> : string

- icmp types\_and\_codes string of <firewall rule> : string
- inbound of <firewall rule> : boolean
- interface of <firewall rule> : string
- interface types string of <firewall rule> : string
- local addresses string of <firewall rule> : string
- local ports string of <firewall rule> : string
- name of <firewall rule> : string
- outbound of <firewall rule> : boolean
- profile <firewall profile type> of <firewall rule> : boolean
- protocol of <firewall rule> : internet protocol
- remote addresses string of <firewall rule> : string
- remote ports string of <firewall rule> : string
- service name of <firewall rule> : string

## firewall scope

The <firewall scope> inspectors provide access to the firewall scope. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

### Version Platforms

8.0.584.0Windows

Creation:

- all firewall scope : firewall scope
- custom firewall scope : firewall scope
- firewall scope <integer> : firewall scope
- local subnet firewall scope : firewall scope
- scope of <firewall authorized application> : firewall scope
- scope of <firewall open port> : firewall scope
- scope of <firewall service> : firewall scope

Operators:

- <firewall scope> = <firewall scope> : boolean

## firewall service

The <firewall service> inspectors provide access to the properties of a service that may be authorized to listen through the firewall. These properties correspond to the INetFwService interface in the Windows Firewall API. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

### Version Platforms

8.0.584.0Windows

Creation:

- service of <firewall profile> : firewall service

Properties:

- customized of <firewall service> : boolean
- enabled of <firewall service> : boolean
- globally open port of <firewall service> : firewall open port
- ip version of <firewall service> : ip version
- name of <firewall service> : string
- remote addresses of <firewall service> : string
- scope of <firewall service> : firewall scope
- type of <firewall service> : firewall service type

## firewall service restriction

The <firewall service restriction> inspectors provide a wrapper for the Windows Firewall Service Restriction. They are Vista-only. On a non-Vista machine, they return no results. For more information see the MSDN Library reference to INetFwServiceRestriction at <http://msdn.microsoft.com/library/>.

**Version Platforms**

8.0.584.0Windows

Creation:

- service restriction of <firewall> : firewall service restriction

Properties:

- rule of <firewall service restriction> : firewall rule
- service restricted <( string, string )> of <firewall service restriction> : boolean

**firewall service type**

The <firewall service type> inspectors provide access to the firewall service type. These properties correspond to the INetFwService.Type interface in the Windows Firewall API. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

**Version Platforms**

8.0.584.0Windows

Creation:

- file\_and\_print firewall service type : firewall service type
- firewall service type <integer> : firewall service type
- none firewall service type : firewall service type
- remote desktop firewall service type : firewall service type
- type of <firewall service> : firewall service type
- upnp firewall service type : firewall service type

Operators:

- <firewall service type> = <firewall service type> : boolean

## internet connection firewall

The <internet connection firewall> inspectors provide access to the settings of the Internet Connection Firewall introduced in Windows XP. The Internet Connection Firewall helps to protect a computer that is directly connected to the Internet, or a home network, from network attacks.

### Version Platforms

8.0.584.0Windows

Creation:

- firewall of <connection> : internet connection firewall
- internet connection firewall of <network adapter> : internet connection firewall

Properties:

- enabled of <internet connection firewall> : boolean
- port mapping of <internet connection firewall> : port mapping

## internet protocol

Returns the firewall internet protocol corresponding to the Microsoft enumerated types, either tcp or udp. The Windows Firewall is supported on Windows XP SP2. For more information, search for 'Windows Firewall API' at the msdn site (<http://msdn.microsoft.com/library/>).

### Version Platforms

8.0.584.0Windows

Creation:

- internet protocol <integer> : internet protocol
- protocol of <firewall open port> : internet protocol
- protocol of <firewall rule> : internet protocol
- tcp : internet protocol



- udp : internet protocol

Operators:

- <internet protocol> = <internet protocol> : boolean

## port mapping

Refers to a port mapping object for the built-in firewall.

### Version Platforms

8.0.584.0Windows

Creation:

- port mapping of <internet connection firewall> : port mapping

Properties:

- enabled of <port mapping> : boolean
- external port of <port mapping> : integer
- internal port of <port mapping> : integer
- name of <port mapping> : string
- options of <port mapping> : integer
- protocol of <port mapping> : string
- target ip address of <port mapping> : ipv4 address
- target ipv4or6 address of <port mapping> : ipv4or6 address
- target name of <port mapping> : string

## Introspectors

## binary operator

The `binary operator` type represents a binary operator in the Relevance Language. This is a form of [reflection](#) that allows you to see what inspectors are available and how to use them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- `binary operator` : `binary operator`
- `binary operator <string>` : `binary operator`
- `binary operator returning <type>` : `binary operator`

Properties:

- left operand type of `<binary operator>` : `type`
- name of `<binary operator>` : `string`
- result type of `<binary operator>` : `type`
- right operand type of `<binary operator>` : `type`
- symbol of `<binary operator>` : `string`

Casts:

- `<binary operator> as string` : `string`

## cast

Some inspectors look at the Relevance language itself, inspecting the inspectors, so to speak. There are several aspects to view, including the types, properties, casts and operators. This group of inspectors looks at the various casting operations available from the Relevance language.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- cast : cast
- cast <string> : cast
- cast from of <type> : cast
- cast returning <type> : cast

Properties:

- name of <cast> : string
- operand type of <cast> : type
- result type of <cast> : type

Casts:

- <cast> as string : string

**property**

The `property` type represents an inspector property in the Relevance Language. This is a form of [reflection](#) that allows you to see what inspectors are available and how to use them.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- property : property
- property <string> : property

- property <string> of <type> : property
- property of <type> : property
- property returning <type> : property
- property returning <type> of <type> : property

#### Properties:

- dependency known of <property> : boolean
- direct object type of <property> : type
- index type of <property> : type
- multivalued of <property> : boolean
- plural name of <property> : string
- result type of <property> : type
- singular name of <property> : string
- usual name of <property> : string

#### Casts:

- <property> as string : string

## type

The `type` object represents a type in the Relevance Language. This is a form of [reflection](#) that allows you to see what inspectors are available and how to use them.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

#### Creation:

- direct object type of <property> : type
- index type of <property> : type
- left operand type of <binary operator> : type

- operand type of <cast> : type
- operand type of <unary operator> : type
- result type of <binary operator> : type
- result type of <cast> : type
- result type of <property> : type
- result type of <unary operator> : type
- right operand type of <binary operator> : type
- type : type
- type <string> : type

#### Properties:

- binary operator returning <type> : binary operator
- cast from of <type> : cast
- cast returning <type> : cast
- name of <type> : string
- parent of <type> : type
- property <string> of <type> : property
- property of <type> : property
- property returning <type> : property
- property returning <type> of <type> : property
- size of <type> : integer
- unary operator returning <type> : unary operator

#### Casts:

- <type> as string : string

#### Operators:

- <type> = <type> : boolean

## unary operator

Some inspectors look at the Relevance language itself, inspecting the inspectors, so to speak. There are several aspects to view, including the types, properties, casts and operators. This group of inspectors looks at the various unary operators available from the Relevance language.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unary operator : unary operator
- unary operator <string> : unary operator
- unary operator returning <type> : unary operator

Properties:

- name of <unary operator> : string
- operand type of <unary operator> : type
- result type of <unary operator> : type
- symbol of <unary operator> : string

Casts:

- <unary operator> as string : string

## IP Address

## ipv4 address

This is an [IPv4](#) address. IPv4 addresses are composed of four single-byte integers separated by periods, such as 192.168.1.7.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130 Raspbian

Creation:

- address of <network adapter> : ipv4 address
- address of <network address list> : ipv4 address
- address of <network ip interface> : ipv4 address
- broadcast address of <network adapter> : ipv4 address
- broadcast address of <network ip interface> : ipv4 address
- destination of <ipv4 route> : ipv4 address
- dhcp server of <network adapter> : ipv4 address
- gateway of <ipv4 route> : ipv4 address
- gateway of <network adapter> : ipv4 address
- ipv4 address <string> : ipv4 address
- ipv4 part of <ipv4or6 address> : ipv4 address
- ipv4 part of <ipv6 address> : ipv4 address
- mask of <ipv4 route> : ipv4 address
- primary wins server of <network adapter> : ipv4 address
- secondary wins server of <network adapter> : ipv4 address
- subnet address of <network adapter> : ipv4 address
- subnet address of <network address list> : ipv4 address
- subnet address of <network ip interface> : ipv4 address
- subnet mask of <network adapter> : ipv4 address
- subnet mask of <network address list> : ipv4 address
- subnet mask of <network ip interface> : ipv4 address
- target ip address of <port mapping> : ipv4 address

## Properties:

- extrema of <ipv4 address> : ( ipv4 address, ipv4 address )
- maximum of <ipv4 address> : ipv4 address
- minimum of <ipv4 address> : ipv4 address
- unique value of <ipv4 address> : ipv4 address with multiplicity

## Casts:

- <ipv4 address> as ipv4or6 address : ipv4or6 address
- <ipv4 address> as ipv6 address : ipv6 address
- <ipv4 address> as string : string

## Operators:

- <ipv4 address> < <ipv4 address> : boolean
- <ipv4 address> < <string> : boolean
- <ipv4 address> <= <ipv4 address> : boolean
- <ipv4 address> <= <string> : boolean
- <ipv4 address> = <ipv4 address> : boolean
- <ipv4 address> = <string> : boolean
- <string> < <ipv4 address> : boolean
- <string> <= <ipv4 address> : boolean
- <string> = <ipv4 address> : boolean

## ipv4 address with multiplicity

The <ipv4 address with multiplicity> inspectors deal with ipv4 address arrays, allowing you to extract unique ipv4 addresses and count them.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian



Creation:

- unique value of <ipv4 address> : ipv4 address with multiplicity

Properties:

- multiplicity of <ipv4 address with multiplicity> : integer

## ipv4 route

No documentation exists.

### Version

### Platforms

8.2.1078.0 Debian, Red Hat, SUSE, Solaris, Ubuntu

9.5.13.130 Raspbian

Creation:

- all route of <ipv4 routing table> : ipv4 route
- route of <ipv4 routing table> : ipv4 route

Properties:

- blackhole flag of <ipv4 route> : boolean
- broadcast flag of <ipv4 route> : boolean
- cache flag of <ipv4 route> : boolean
- default flag of <ipv4 route> : boolean
- destination of <ipv4 route> : ipv4 address
- dynamic flag of <ipv4 route> : boolean
- gateway flag of <ipv4 route> : boolean
- gateway of <ipv4 route> : ipv4 address
- host flag of <ipv4 route> : boolean
- interface of <ipv4 route> : string
- irtt of <ipv4 route> : integer
- local flag of <ipv4 route> : boolean

- loopback flag of <ipv4 route> : boolean
- mask of <ipv4 route> : ipv4 address
- metric of <ipv4 route> : integer
- modified flag of <ipv4 route> : boolean
- mtu of <ipv4 route> : integer
- multiroute flag of <ipv4 route> : boolean
- prefix flag of <ipv4 route> : boolean
- private flag of <ipv4 route> : boolean
- reference count of <ipv4 route> : integer
- reject flag of <ipv4 route> : boolean
- setsrc flag of <ipv4 route> : boolean
- static flag of <ipv4 route> : boolean
- up flag of <ipv4 route> : boolean
- use count of <ipv4 route> : integer
- window of <ipv4 route> : integer

## ipv4 routing table

No documentation exists.

### Version

### Platforms

8.2.1078.0Debian, Red Hat, SUSE, Solaris, Ubuntu

9.5.13.130Raspbian

Creation:

- ipv4 routing table : ipv4 routing table

Properties:

- all route of <ipv4 routing table> : ipv4 route
- route of <ipv4 routing table> : ipv4 route

## ipv4or6 address

The <ipv4or6 address> inspectors allow you to represent IPv4 and IPv6 addresses as a common type. From these inclusive inspectors, you can derive the corresponding v4 and v6 IP addresses.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130 Raspbian

Creation:

- address of <network adapter interface> : ipv4or6 address
- broadcast address of <network adapter interface> : ipv4or6 address
- destination of <route> : ipv4or6 address
- full gateway address of <selected server> : ipv4or6 address
- gateway address <integer> of <selected server> : ipv4or6 address
- gateway address of <selected server> : ipv4or6 address
- gateway of <route> : ipv4or6 address
- ip address of <bes computer> : ipv4or6 address
- ip address of <selected server> : ipv4or6 address
- ipv4or6 address <string> : ipv4or6 address
- ipv4or6 dns server of <network adapter> : ipv4or6 address
- local address of <socket> : ipv4or6 address
- mask of <route> : ipv4or6 address
- registration address of <client> : ipv4or6 address
- registration subnet address of <client> : ipv4or6 address
- remote address of <socket> : ipv4or6 address
- subnet address of <network adapter interface> : ipv4or6 address
- subnet mask of <network adapter interface> : ipv4or6 address
- target ipv4or6 address of <port mapping> : ipv4or6 address
- <ipv4 address> as ipv4or6 address : ipv4or6 address
- <ipv6 address> as ipv4or6 address : ipv4or6 address

- <string> as ipv4or6 address : ipv4or6 address

#### Properties:

- extrema of <ipv4or6 address> : ( ipv4or6 address, ipv4or6 address )
- hexadecet <integer> of <ipv4or6 address> : integer
- ip version of <ipv4or6 address> : ip version
- ipv4 part of <ipv4or6 address> : ipv4 address
- maximum of <ipv4or6 address> : ipv4or6 address
- minimum of <ipv4or6 address> : ipv4or6 address
- unique value of <ipv4or6 address> : ipv4or6 address with multiplicity

#### Casts:

- <ipv4or6 address> as compressed string : string
- <ipv4or6 address> as compressed string with ipv4 : string
- <ipv4or6 address> as compressed string with ipv4 with zone index : string
- <ipv4or6 address> as compressed string with zone index : string
- <ipv4or6 address> as string : string
- <ipv4or6 address> as string with ipv4 : string
- <ipv4or6 address> as string with ipv4 with zone index : string
- <ipv4or6 address> as string with leading zeros : string
- <ipv4or6 address> as string with leading zeros with zone index : string
- <ipv4or6 address> as string with zone index : string

#### Operators:

- <ipv4or6 address> < <ipv4or6 address> : boolean
- <ipv4or6 address> < <string> : boolean
- <ipv4or6 address> <= <ipv4or6 address> : boolean
- <ipv4or6 address> <= <string> : boolean
- <ipv4or6 address> = <ipv4or6 address> : boolean
- <ipv4or6 address> = <string> : boolean
- <string> < <ipv4or6 address> : boolean

- <string> <= <ipv4or6 address> : boolean
- <string> = <ipv4or6 address> : boolean

## ipv4or6 address with multiplicity

The <ipv4or6 address with multiplicity> inspectors deal with arrays of ipv4or6 addresses, allowing you to extract unique addresses and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <ipv4or6 address> : ipv4or6 address with multiplicity

Properties:

- multiplicity of <ipv4or6 address with multiplicity> : integer

## ipv6 address

The <ipv6 address> inspectors deal with the Internet Protocol addressing scheme, version 6. Note: Prior to version 8.0 of BigFix, this was not a derived type.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- ipv6 address <string> : ipv6 address
- ipv6 address of <network adapter> : ipv6 address
- ipv6 dns server of <network adapter> : ipv6 address
- <ipv4 address> as ipv6 address : ipv6 address

- <string> as ipv6 address : ipv6 address

#### Properties:

- extrema of <ipv6 address> : ( ipv6 address, ipv6 address )
- hexadecet <integer> of <ipv6 address> : integer
- ipv4 part of <ipv6 address> : ipv4 address
- maximum of <ipv6 address> : ipv6 address
- minimum of <ipv6 address> : ipv6 address
- unique value of <ipv6 address> : ipv6 address with multiplicity

#### Casts:

- <ipv6 address> as compressed string : string
- <ipv6 address> as compressed string with ipv4 : string
- <ipv6 address> as compressed string with ipv4 with zone index : string
- <ipv6 address> as compressed string with zone index : string
- <ipv6 address> as ipv4or6 address : ipv4or6 address
- <ipv6 address> as string : string
- <ipv6 address> as string with ipv4 : string
- <ipv6 address> as string with ipv4 with zone index : string
- <ipv6 address> as string with leading zeros : string
- <ipv6 address> as string with leading zeros with zone index : string
- <ipv6 address> as string with zone index : string

#### Operators:

- <ipv6 address> < <ipv6 address> : boolean
- <ipv6 address> <= <ipv6 address> : boolean
- <ipv6 address> = <ipv6 address> : boolean

## ipv6 address with multiplicity

The <ipv6 address with multiplicity> inspectors deal with ipv6 address arrays, allowing you to extract unique ipv6 addresses and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <ipv6 address> : ipv6 address with multiplicity

Properties:

- multiplicity of <ipv6 address with multiplicity> : integer

## Network

### connection

The <connection> objects are used to query your connections. These are all properties of the Internet Connection Firewall, as returned in the NETCON\_PROPERTIES structure.

### Version Platforms

8.0.584.0Windows

Creation:

- connection of <network> : connection

Properties:

- device name of <connection> : string

- firewall of <connection> : internet connection firewall
- guid of <connection> : string
- media type of <connection> : media type
- name of <connection> : string
- status of <connection> : connection status

## **connection status**

The <connection status> objects return information about the status of your connections.

### **Version Platforms**

8.0.584.0Windows

Creation:

- connection status <integer> : connection status
- connection status authenticating : connection status
- connection status authentication failed : connection status
- connection status authentication succeeded : connection status
- connection status connected : connection status
- connection status connecting : connection status
- connection status disconnected : connection status
- connection status disconnecting : connection status
- connection status hardware disabled : connection status
- connection status hardware malfunction : connection status
- connection status media disconnected : connection status
- connection status no hardware present : connection status
- status of <connection> : connection status

Operators:

- <connection status> = <connection status> : boolean



## ip version

The <ip version> inspectors distinguish between ipv6 and ipv4. The integer representations of these are chosen to meet existing standards.

Version	Platforms
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- any ip version : ip version
- ip version <integer> : ip version
- ip version of <firewall authorized application> : ip version
- ip version of <firewall open port> : ip version
- ip version of <firewall service> : ip version
- ip version of <ipv4or6 address> : ip version
- ipv4 : ip version ipv6 : ip version

Casts:

- <ip version> as string : string

Operators:

- <ip version> = <ip version> : boolean

## media type

The <media type> objects allow you to inspect the media type of your Internet Connection Firewall type connection, as returned in the NETCON\_PROPERTIES structure.

### Version Platforms

8.0.584.0Windows

Creation:

- media type <integer> : media type
- media type bridge : media type
- media type direct : media type
- media type isdn : media type
- media type lan : media type
- media type of <connection> : media type
- media type phone : media type
- media type pppoe : media type
- media type shared access host lan : media type
- media type shared access host ras : media type
- media type tunnel : media type

Operators:

- <media type> = <media type> : boolean

## network share

The network share inspector does not work on Windows 95/98/Me. The password and permission properties are relevant only for shares using share-level security. User-level security is given by the security descriptor. The use limit property will throw NoSuchObject if use is unlimited.

### Version Platforms

8.0.584.0Windows

Creation:

- network share : network share
- network share <string> : network share

Properties:

- attribute permission of <network share> : boolean

- comment of <network share> : string
- create permission of <network share> : boolean
- delete permission of <network share> : boolean
- execute permission of <network share> : boolean
- name of <network share> : string
- password of <network share> : string
- path of <network share> : string
- permission permission of <network share> : boolean
- read permission of <network share> : boolean
- security descriptor of <network share> : security descriptor
- type of <network share> : integer
- use count of <network share> : integer
- use limit of <network share> : integer
- write permission of <network share> : boolean

## route

No documentation exists.

### Version

### Platforms

9.1.1065.0 Debian, Mac, Red Hat, SUSE, Ubuntu

9.5.13.130 Raspbian

Creation:

- route of <routing table> : route

Properties:

- blackhole flag of <route> : boolean
- broadcast flag of <route> : boolean
- cloned of <route> : boolean
- cloning flag of <route> : boolean
- condemned flag of <route> : boolean
- default of <route> : boolean

- delclone flag of <route> : boolean
- destination of <route> : ipv4or6 address
- destination string of <route> : string
- destination type of <route> : string
- done flag of <route> : boolean
- dynamic flag of <route> : boolean
- expiration time of <route> : time
- flags string of <route> : string
- gateway flag of <route> : boolean
- gateway of <route> : ipv4or6 address
- gateway string of <route> : string
- gateway type of <route> : string
- host flag of <route> : boolean
- ifref flag of <route> : boolean
- ifscope flag of <route> : boolean
- interface of <route> : string
- ip family of <route> : string
- irtt of <route> : integer
- linfo flag of <route> : boolean
- local flag of <route> : boolean
- mask of <route> : ipv4or6 address
- metric of <route> : integer
- modified flag of <route> : boolean
- mtu of <route> : integer
- multicast flag of <route> : boolean
- netstat flag of <route> : string
- pinned flag of <route> : boolean
- prcloning flag of <route> : boolean
- proto1 flag of <route> : boolean
- proto2 flag of <route> : boolean
- proto3 flag of <route> : boolean
- proxy flag of <route> : boolean

- reference of <route> : integer
- reject flag of <route> : boolean
- router flag of <route> : boolean
- seconds to expiration of <route> : integer
- sent packet count of <route> : integer
- static flag of <route> : boolean
- up flag of <route> : boolean
- wascloned flag of <route> : boolean
- window of <route> : integer
- xresolve flag of <route> : boolean

## routing table

No documentation exists.

### Version

### Platforms

9.1.1065.0 Debian, Mac, Red Hat, SUSE, Ubuntu

9.5.13.130 Raspbian

Creation:

- ipv4 routing table : routing table
- ipv6 routing table : routing table
- routing table : routing table

Properties:

- route of <routing table> : route

## network

The <network> objects are the keywords used to query the local network configuration.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

## Version

## Platforms

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- network : network

Properties:

- adapter <integer> of <network> : network adapter
- adapter <string> of <network> : network adapter
- adapter of <network> : network adapter
- any adapter <integer> of <network> : network adapter
- any adapter of <network> : network adapter
- connection of <network> : connection
- dns server of <network> : network address list
- find adapter <string> of <network> : network adapter
- interface <integer> of <network> : network interface
- interface of <network> : network interface
- ip interface <integer> of <network> : network ip interface
- ip interface of <network> : network ip interface
- ipv4 interface <integer> of <network> : network adapter interface
- ipv4 interface of <network> : network adapter interface
- ipv4or6 interface <integer> of <network> : network adapter interface
- ipv4or6 interface of <network> : network adapter interface
- ipv6 interface <integer> of <network> : network adapter interface
- ipv6 interface of <network> : network adapter interface
- link interface <integer> of <network> : network link interface
- link interface of <network> : network link interface
- socket of <network> : socket
- winsock2 supported of <network> : boolean

## network adapter

One or more network adapters may be inspected using this property of the network object. Each network adapter has a number of interesting properties such as the MAC address.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130 Raspbian

Creation:

- adapter <integer> of <network> : network adapter
- adapter <string> of <network> : network adapter
- adapter of <network adapter interface> : network adapter
- adapter of <network> : network adapter
- any adapter <integer> of <network> : network adapter
- any adapter of <network> : network adapter
- find adapter <string> of <network> : network adapter

Properties:

- address list of <network adapter> : network address list
- address of <network adapter> : ipv4 address
- broadcast address of <network adapter> : ipv4 address
- broadcast support of <network adapter> : boolean
- cidr address of <network adapter> : string
- cidr string of <network adapter> : string
- description of <network adapter> : string
- dhcp enabled of <network adapter> : boolean
- dhcp server of <network adapter> : ipv4 address
- dns server of <network adapter> : network address list
- dns suffix of <network adapter> : string
- friendly name of <network adapter> : string

- gateway list of <network adapter> : network address list
- gateway of <network adapter> : ipv4 address
- interface of <network adapter> : network interface
- internet connection firewall of <network adapter> : internet connection firewall
- ip interface of <network adapter> : network ip interface
- ipv4 interface <integer> of <network adapter> : network adapter interface
- ipv4 interface of <network adapter> : network adapter interface
- ipv4or6 dns server of <network adapter> : ipv4or6 address
- ipv4or6 interface <integer> of <network adapter> : network adapter interface
- ipv4or6 interface of <network adapter> : network adapter interface
- ipv6 address of <network adapter> : ipv6 address
- ipv6 dns server of <network adapter> : ipv6 address
- ipv6 interface <integer> of <network adapter> : network adapter interface
- ipv6 interface of <network adapter> : network adapter interface
- lease expires of <network adapter> : time
- lease obtained of <network adapter> : time
- link interface of <network adapter> : network link interface
- link speed of <network adapter> : integer
- loopback of <network adapter> : boolean
- mac address of <network adapter> : string
- maximum transmission unit of <network adapter> : integer
- multicast support of <network adapter> : boolean
- name of <network adapter> : string
- point to point of <network adapter> : boolean
- primary wins server of <network adapter> : ipv4 address
- secondary wins server of <network adapter> : ipv4 address
- status of <network adapter> : integer
- subnet address of <network adapter> : ipv4 address
- subnet mask of <network adapter> : ipv4 address
- tunnel of <network adapter> : boolean
- type of <network adapter> : integer
- up of <network adapter> : boolean



- wakeonlan enabled of <network adapter> : boolean
- wifi of <network adapter> : wifi
- wins enabled of <network adapter> : boolean

## network adapter interface

A network adapter interfaces a computer to a network. These inspectors expose the adapter so that you can determine its properties, such as its address, subnet mask, mac address and whether or not it supports broadcast, multicast or point-to-point.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- ipv4 interface <integer> of <network adapter> : network adapter interface
- ipv4 interface <integer> of <network> : network adapter interface
- ipv4 interface of <network adapter> : network adapter interface
- ipv4 interface of <network> : network adapter interface
- ipv4or6 interface <integer> of <network adapter> : network adapter interface
- ipv4or6 interface <integer> of <network> : network adapter interface
- ipv4or6 interface of <network adapter> : network adapter interface
- ipv4or6 interface of <network> : network adapter interface
- ipv6 interface <integer> of <network adapter> : network adapter interface
- ipv6 interface <integer> of <network> : network adapter interface
- ipv6 interface of <network adapter> : network adapter interface
- ipv6 interface of <network> : network adapter interface

Properties:

- adapter of <network adapter interface> : network adapter
- address of <network adapter interface> : ipv4or6 address
- broadcast address of <network adapter interface> : ipv4or6 address

- broadcast support of <network adapter interface> : boolean
- cidr address of <network adapter interface> : string
- cidr string of <network adapter interface> : string
- loopback of <network adapter interface> : boolean
- mac address of <network adapter interface> : string
- multicast support of <network adapter interface> : boolean
- point to point of <network adapter interface> : boolean
- subnet address of <network adapter interface> : ipv4or6 address
- subnet mask of <network adapter interface> : ipv4or6 address
- up of <network adapter interface> : boolean

## network address list

A network adapter may be configured to respond to a list of network addresses. This object type provides access to such a list.

### Version Platforms

8.0.584.0Windows

Creation:

- address list of <network adapter> : network address list
- dns server of <network adapter> : network address list
- dns server of <network> : network address list
- gateway list of <network adapter> : network address list

Properties:

- address of <network address list> : ipv4 address
- cidr address of <network address list> : string
- cidr string of <network address list> : string
- subnet address of <network address list> : ipv4 address
- subnet mask of <network address list> : ipv4 address

## network interface

The network interface object describes a generic network interface, and has information about the name and family of that interface. On the Mac these are commonly of type AF\_INET, AF\_LINK and AF\_INET6.

Version	Platforms
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- interface <integer> of <network> : network interface
- interface of <network adapter> : network interface
- interface of <network> : network interface

Properties:

- family name of <network interface> : string
- family of <network interface> : integer
- name of <network interface> : string
- up of <network interface> : boolean

## network ip interface

In general, the network ip interface object holds locally determined properties of logical network devices configured on the computer. On the Mac, these correspond to interfaces of type AF\_INET. The properties that are available depend on the socket support installed on the computer. For Windows computers with winsock 2 support installed, for instance, the information is obtained by an ioctl call and includes Interface address, Interface broadcast address, Interface network mask, Broadcast support flag, Multicast support flag, Loopback interface flag and Point to point interface flag.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- ip interface <integer> of <network> : network ip interface
- ip interface of <network adapter> : network ip interface
- ip interface of <network> : network ip interface
- primary internet connection : network ip interface

Properties:

- address of <network ip interface> : ipv4 address
- alias of <network ip interface> : boolean
- broadcast address of <network ip interface> : ipv4 address
- broadcast support of <network ip interface> : boolean
- cidr address of <network ip interface> : string
- cidr string of <network ip interface> : string
- loopback of <network ip interface> : boolean
- mac address of <network ip interface> : string
- multicast support of <network ip interface> : boolean
- name of <network ip interface> : string
- point to point of <network ip interface> : boolean
- subnet address of <network ip interface> : ipv4 address
- subnet mask of <network ip interface> : ipv4 address
- up of <network ip interface> : boolean

**network link interface**

The network link interface objects correspond to interfaces of type AF\_LINK.

**Version Platforms**

8.0.584.0Mac

Creation:

- link interface <integer> of <network> : network link interface
- link interface of <network adapter> : network link interface
- link interface of <network> : network link interface

Properties:

- mac address of <network link interface> : string

**wifi**

These inspectors expose the WiFi adapters available on an endpoint.

**Version Platforms**

9.0.586.0Windows

9.5.3.211Mac

Creation:

- wifi of <network adapter> : wifi

Properties:

- current network of <wifi> : wifi network
- enabled of <wifi> : boolean
- encryption of <wifi> : string
- name of <wifi> : string
- secured of <wifi> : boolean
- ssid of <wifi> : string
- visible network of <wifi> : wifi network

## socket

These inspectors expose the sockets opened on the network on the endpoint.

Version	Platforms
9.0.586.0	Windows
9.1.1065.0	Debian, HP-UX, Red Hat, SUSE, Ubuntu
9.2.0.363	AIX, Mac
9.5.13.130	Raspbian

Creation:

- socket of <network> : socket

Properties:

- local address of <socket> : ipv4or6 address
- local port of <socket> : integer
- process of <socket> : process
- remote address of <socket> : ipv4or6 address
- remote port of <socket> : integer
- tcp of <socket> : boolean
- tcp state of <socket> : tcp state
- udp of <socket> : boolean

## socket file

The <socket file> inspectors allow you to interrogate socket files, which are representations of UNIX domain sockets identified by their pathname.

Version	Platforms
8.0.584.0	AIX, HP-UX, Red Hat, SUSE, Solaris
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

Creation:

- socket file <filesystem object> : socket file
- socket file <string> : socket file
- socket file <string> of <folder> : socket file
- socket file <symlink> : socket file
- socket file of <folder> : socket file
- <filesystem object> as socket file : socket file
- <symlink> as socket file : socket file

Properties:

- drive of <socket file> : filesystem
- filesystem of <socket file> : filesystem

## tcp state

These inspectors expose the state of a socket on an endpoint.

Version	Platforms
9.0.586.0	Windows
9.1.1065.0	Debian, HP-UX, Red Hat, SUSE, Ubuntu
9.2.0.363	AIX, Mac
9.5.13.130	Raspbian

Creation:

- tcp state of <socket> : tcp state

Properties:

- close wait of <tcp state> : boolean
- closed of <tcp state> : boolean
- closing of <tcp state> : boolean
- delete tcb of <tcp state> : boolean
- established of <tcp state> : boolean

- fin wait one of <tcp state> : boolean
- fin wait two of <tcp state> : boolean
- last ack of <tcp state> : boolean
- listening of <tcp state> : boolean
- syn received of <tcp state> : boolean
- syn sent of <tcp state> : boolean
- time wait of <tcp state> : boolean

Casts:

- <tcp state> as string : string

## wifi network

The type returned by both "current network of" and "visible networks of" objects.

### Version Platforms

9.5.5.193Mac, Windows

Creation:

- current network of <wifi> : wifi network
- visible network of <wifi> : wifi network

Properties:

- bssid of <wifi network> : string
- channel band of <wifi network> : string
- channel number of <wifi network> : integer
- ibss of <wifi network> : boolean
- rssi of <wifi network> : integer
- secured of <wifi network> : boolean
- signal strength of <wifi network> : integer
- ssid of <wifi network> : string



# Power

## monitor power interval

The <monitor power interval> inspectors return information about the monitors (displays) attached to a given computer. Each computer can have multiple monitors, and they can be either on or off. This information can be used in a power-usage study. Monitor intervals are retrieved as tuples in the form of <interval, state, monitor count>, where the interval contains the start and end time, the state (on or off) and the number of monitors that are attached to the computer.

### Version Platforms

8.0.584.0Windows

8.1.535.0Mac

Creation:

- current monitor interval of <power history> : monitor power interval
- last monitor interval in <power state> of <power history> : monitor power interval
- last monitor interval in monitor off state of <power history> : monitor power interval
- last monitor interval in monitor on state of <power history> : monitor power interval
- monitor interval of <power history> : monitor power interval

Properties:

- count of <monitor power interval> : integer
- range of <monitor power interval> : time range
- state of <monitor power interval> : power state

## power history

The <power history> inspectors retrieve information about your client computers and their displays within a tracking window (defaulting to 14 days). The information is in the

form of a list of <interval, state> tuples for the system (computer) and <interval, state, monitor count> for monitors (attached displays). The first element of the list is the current state of the system. These inspectors allow you to track computer usage for power management applications. The event lists are fetched from the client whenever 'power history' is referenced, and referencing 'system intervals of <power history>' simply iterates over the built list of intervals. Avoid referencing 'power history' multiple times in relevance as it rebuilds the list each time (increasing overhead) and may introduce inconsistency if the window slides between references.

### **Version Platforms**

8.0.584.0Windows

8.1.535.0Mac

Creation:

- power history : power history

Properties:

- current monitor interval of <power history> : monitor power interval
- current system interval of <power history> : system power interval
- last monitor interval in <power state> of <power history> : monitor power interval
- last monitor interval in monitor off state of <power history> : monitor power interval
- last monitor interval in monitor on state of <power history> : monitor power interval
- last system interval in <power state> of <power history> : system power interval
- last system interval in active state of <power history> : system power interval
- last system interval in idle state of <power history> : system power interval
- last system interval in logged off state of <power history> : system power interval
- last system interval in off state of <power history> : system power interval
- last system interval in standby state of <power history> : system power interval
- monitor interval of <power history> : monitor power interval
- system interval of <power history> : system power interval

## power level

The <power level> inspectors provide exposure to the underlying batter and power information used by low-power modes. On Windows, this uses the GetSystemPowerStatus system call, and on OSX, it uses the IOPSCopyPowerSourcesList functionality.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- power level : power level

Properties:

- full of <power level> : boolean
- low of <power level> : boolean
- normal of <power level> : boolean
- plugged of <power level> : boolean
- ups of <power level> : boolean

Casts:

- <power level> as string : string

## power state

The <power state> inspectors return the state of a device, encapsulating the enumerated types used by the Client. There are two categories, system and monitor. System (computer) states include active, idle, logged off, standby, off and invalid. Monitor (display) states include on, off and invalid.

### Version Platforms

8.0.584.0Windows

## Version Platforms

8.1.535.0Mac

Creation:

- active state : power state
- idle state : power state
- invalid state : power state
- logged off state : power state
- monitor invalid state : power state
- monitor off state : power state
- monitor on state : power state
- monitor standby state : power state
- off state : power state
- standby state : power state
- state of <monitor power interval> : power state
- state of <system power interval> : power state

Casts:

- <power state> as string : string

Operators:

- <power state> = <power state> : boolean

## system power interval

The <system power interval> inspectors return an interval or a list of intervals that contain information about the client computer. Each system interval is composed of a time range and a power state, which can include on, off, standby or hibernate.

## Version Platforms

8.0.584.0Windows

8.1.535.0Mac

**Creation:**

- current system interval of <power history> : system power interval
- last system interval in <power state> of <power history> : system power interval
- last system interval in active state of <power history> : system power interval
- last system interval in idle state of <power history> : system power interval
- last system interval in logged off state of <power history> : system power interval
- last system interval in off state of <power history> : system power interval
- last system interval in standby state of <power history> : system power interval
- system interval of <power history> : system power interval
- user interval <activity history> : system power interval
- user interval of <activity history> : system power interval

**Properties:**

- range of <system power interval> : time range
- state of <system power interval> : power state

## Processes

### environment

Environment variables define a particular set of paths and variables for a computer or an application. These inspectors let you examine this set.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows
8.1.535.0	Debian, Ubuntu
9.5.13.130	Raspbian

**Creation:**

- environment : environment

- environment of <process> : environment

Properties:

- variable <string> of <environment> : environment variable
- variable of <environment> : environment variable
- x64 variable <string> of <environment> : environment variable
- x64 variable of <environment> : environment variable

## environment variable

Every variable defined by the environment has both a name and a value. Both names and values are treated as strings.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- variable <string> of <environment> : environment variable
- variable of <environment> : environment variable
- x64 variable <string> of <environment> : environment variable
- x64 variable of <environment> : environment variable

Properties:

- name of <environment variable> : string
- value of <environment variable> : string

Casts:

- <environment variable> as string : string

## priority class

Threads are scheduled based on priority, which ranges from zero, the lowest, to 31, the highest. The zero-page thread, a system thread in charge of zeroing free pages when all other threads are finished, is the only thread allowed to have a priority of zero.

### Version Platforms

8.0.584.0Windows

Creation:

- above normal priority : priority class
- base priority of <process> : priority class
- below normal priority : priority class
- high priority : priority class
- idle priority : priority class
- normal priority : priority class
- realtime priority : priority class

Operators:

- <priority class> = <priority class> : boolean

## process

A `process` object is a running process.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- init process of <zone> : process
- process : process

- process <integer> : process
- process <string> : process
- process of <socket> : process

#### Properties:

- base priority of <process> : priority class
- command line argument <integer> of <process> : string
- command line argument of <process> : string
- creation time of <process> : time
- dep enabled of <process> : boolean
- effective user of <process> : user
- elapsed time of <process> : time interval
- environment of <process> : environment
- exec shield of <process> : boolean
- exec time of <process> : time interval
- gdi object count of <process> : integer
- handle count of <process> : integer
- id of <process> : integer
- image file of <process> : file
- io other count of <process> : integer
- io other size of <process> : integer
- io read count of <process> : integer
- io read size of <process> : integer
- io write count of <process> : integer
- io write size of <process> : integer
- kernel time of <process> : time interval
- loginuid of <process> : integer
- name of <process> : string
- nx bit of <process> : boolean
- page fault count of <process> : integer
- page file usage of <process> : integer
- peak page file usage of <process> : integer



- peak working set size of <process> : integer
- pid of <process> : integer
- policy of <process> : string
- posix capability of <process> : integer
- ppid of <process> : integer
- priority of <process> : integer
- process id of <process> : integer
- quota nonpaged pool usage of <process> : integer
- quota paged pool usage of <process> : integer
- quota peak nonpaged pool usage of <process> : integer
- quota peak paged pool usage of <process> : integer
- schedule class of <process> : string
- selinux context of <process> : string
- selinux domain of <process> : string
- session id of <process> : integer
- session of <process> : integer
- start time of <process> : time
- tty of <process> : string
- user object count of <process> : integer
- user of <process> : security identifier
- user of <process> : user
- user time of <process> : time interval
- working set size of <process> : integer
- wow64 of <process> : boolean
- zone of <process> : zone

## Processor

### **cpupackage**

No documentation exists.

## Version

## Platforms

8.2.1078.0 AIX, Debian, HP-UX, Mac, Red Hat, SUSE, Solaris, Ubuntu, Windows

9.5.13.130 Raspbian

Creation:

- cpupackage : cpupackage

Properties:

- core of <cpupackage> : integer
- count of <cpupackage> : integer
- smt capable of <cpupackage> : boolean
- smt enabled of <cpupackage> : boolean
- thread of <cpupackage> : integer

## hertz

The <hertz> object is useful to measure clock cycles. It is used primarily to measure clock frequency by the speed of the processor inspector. Hertz objects have a resolution of 1 hertz and are stored internally as a 64 bit signed integer.

## Version

## Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130 Raspbian

Creation:

- ghz : hertz
- greatest hz : hertz
- hz : hertz
- khz : hertz
- least hz : hertz
- mhz : hertz
- performance counter frequency of <operating system> : hertz

- speed of <processor> : hertz

#### Properties:

- absolute value of <hertz> : hertz
- extrema of <hertz> : ( hertz, hertz )
- maximum of <hertz> : hertz
- minimum of <hertz> : hertz
- significant digits <integer> of <hertz> : hertz
- unique value of <hertz> : hertz with multiplicity

#### Casts:

- <hertz> as string : string

#### Operators:

- - <hertz> : hertz
- <hertz> \* <integer> : hertz
- <hertz> + <hertz> : hertz
- <hertz> - <hertz> : hertz
- <hertz> / <hertz> : integer
- <hertz> / <integer> : hertz
- <hertz> < <hertz> : boolean
- <hertz> <= <hertz> : boolean
- <hertz> = <hertz> : boolean
- <hertz> mod <hertz> : hertz
- <integer> \* <hertz> : hertz

### **hertz with multiplicity**

The <hertz with multiplicity> inspectors deal with hertz arrays, allowing you to extract unique hertz values and count them.

### **Version**

### **Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <hertz> : hertz with multiplicity

Properties:

- multiplicity of <hertz with multiplicity> : integer

## **processor**

The <processor> inspector is used to identify the number and properties of processors in the system. Many operating systems support multiple CPUs and processors. You can inspect any one of them by their ordinal number. On Linux, most of these inspector properties look into the /proc/cpuinfo file to find the requested information.

### **Version**

### **Platforms**

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- main processor : processor
- processor : processor
- processor <integer> : processor

Properties:

- adjustment <integer> of <processor> : integer
- altivec of <processor> : boolean
- architected of <processor> : boolean

- bogomips of <processor> : integer
- brand id of <processor> : integer
- brand string of <processor> : string
- capability of <processor> : integer
- coma bug of <processor> : boolean
- cpuid level of <processor> : integer
- cpus configured of <processor> : integer
- cpus reserved of <processor> : integer
- cpus standby of <processor> : integer
- cpus total of <processor> : integer
- decimal fpu of <processor> : boolean
- extended family of <processor> : integer
- extended feature mask of <processor> : integer
- extended model of <processor> : integer
- f00f bug of <processor> : boolean
- family name of <processor> : string
- family of <processor> : integer
- family of <processor> : string
- fdiv bug of <processor> : boolean
- feature mask of <processor> : integer
- flag list of <processor> : string
- fpu exception of <processor> : boolean
- fpu of <processor> : boolean
- fputype of <processor> : string
- hlt bug of <processor> : boolean
- ic snoop of <processor> : boolean
- id of <processor> : integer
- index of <processor> : integer
- lpar adjustment of <processor> : integer
- lpar characteristics of <processor> : string
- lpar cpus configured of <processor> : integer
- lpar cpus dedicated of <processor> : integer

- lpar cpus reserved of <processor> : integer
- lpar cpus shared of <processor> : integer
- lpar cpus standby of <processor> : integer
- lpar cpus total of <processor> : integer
- lpar name of <processor> : string
- lpar number of <processor> : integer
- machine name of <processor> : string
- machine serial number of <processor> : string
- mmu of <processor> : boolean
- model name of <processor> : string
- model of <processor> : integer
- model of <processor> : string
- revision of <processor> : string
- run mode of <processor> : string
- sep bug of <processor> : boolean
- sequence code of <processor> : string
- smt of <processor> : boolean
- spe double of <processor> : boolean
- spe float of <processor> : boolean
- spe of <processor> : boolean
- speed of <processor> : hertz
- state of <processor> : string
- stepping of <processor> : integer
- type of <processor> : integer
- type of <processor> : string
- vendor name of <processor> : string
- version of <processor> : string
- vm adjustment of <processor> : integer
- vm control program of <processor> : string
- vm cpus configured of <processor> : integer
- vm cpus reserved of <processor> : integer
- vm cpus standby of <processor> : integer

- vm cpus total of <processor> : integer
- vm name of <processor> : string
- wp of <processor> : boolean

## Regular Expressions

### regular expression

The <regular expression> inspectors let you use regular expressions (or regexes) in relevance statements. They use the boost library implementation of the 'POSIX-Extended' regular expression syntax, as documented at Wikipedia using the search term "posix-extended regex".

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- case insensitive regex <string> : regular expression
- case insensitive regular expression <string> : regular expression
- regex <string> : regular expression
- regular expression <string> : regular expression

Operators:

- <regular expression> = <string> : boolean
- <string> = <regular expression> : boolean
- <string> contains <regular expression> : boolean
- <string> ends with <regular expression> : boolean
- <string> starts with <regular expression> : boolean

## regular expression match

The <regular expression match> inspectors let you match regular expressions (or regexes) in relevance statements. They use the boost library implementation of the 'POSIX-Extended' regular expression syntax, as documented at Wikipedia using the search term "posix-extended regex".

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- first match <regular expression> of <string> : regular expression match
- match <regular expression> of <string> : regular expression match

Properties:

- parenthesized part <integer> of <regular expression match> : substring
- parenthesized part of <regular expression match> : substring

## RPM

### capability

A package can have capabilities that it requires, provides, obsoletes, or conflicts with. For instance, apache may require sh, and provide httpd. If you want to install apache, you will need to have sh in the RPM database. If you want to install a package that uses httpd, you will need to install apache.

### Version Platforms

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX



**Creation:**

- capability <string> : capability
- capability <string> of <rpmdatabase> : capability
- conflict of <package> : capability
- installed file of <package> : capability
- obsolete of <package> : capability
- provide of <package> : capability
- require of <package> : capability

**Properties:**

- name of <capability> : string
- relation of <capability> : string
- version of <capability> : string

**Casts:**

- <capability> as string : string

**Operators:**

- <capability> contains <capability> : boolean

**package**

This filesystem object can inspect the properties of an RPM (RPM Package Manager) package. Each package contains information about the program, including name and version.

**Version    Platforms**

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX

**Creation:**

- package <string> of <rpmdatabase> : package
- package conflicting with <capability> of <rpmdatabase> : package
- package installing <capability> of <rpmdatabase> : package
- package of <rpmdatabase> : package
- package providing <capability> of <rpmdatabase> : package
- package requiring <capability> of <rpmdatabase> : package

#### Properties:

- architecture of <package> : string
- conflict of <package> : capability
- installed file of <package> : capability
- name of <package> : string
- obsolete of <package> : capability
- provide of <package> : capability
- require of <package> : capability
- rpm version record of <package> : rpm package version record
- signature keyid of <package> : string
- unique name of <package> : string
- version of <package> : version

#### Casts:

- <package> as string : string

## rpm package release

The <rpm package release> inspectors disclose properties of the RPM package version record inspector. They are collected from the 'Release' component of the Epoch, Version and Release fields associated with an RPM package. The behavior of this inspector differs from a string, because they are sorted according to RPM rules defined by the `rpmvercmp()` function of the RPM library. Do not create an <rpm package release> inspector with

embedded '-' or whitespace characters. These characters are disallowed in RPM, and will cause the statement to fail.

**Note:** Requires the presence of the RPM library and librpminfo (an open source library created by BigFix containing modified RPM library code) on the client machine. librpminfo is installed on the client as part of the normal BES client RPM installation procedure.

### **Version    Platforms**

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX

Creation:

- release of <rpm package version record> : rpm package release
- release of <short rpm package version record> : rpm package release
- rpm package release <string> : rpm package release

Properties:

- extrema of <rpm package release> : ( rpm package release, rpm package release )
- maximum of <rpm package release> : rpm package release
- minimum of <rpm package release> : rpm package release
- rpm package release <rpm package release> : rpm package release
- unique value of <rpm package release> : rpm package release with multiplicity

Casts:

- <rpm package release> as rpm package release : rpm package release
- <rpm package release> as string : string

Operators:

- <rpm package release> < <rpm package release> : boolean
- <rpm package release> < <string> : boolean
- <rpm package release> <= <rpm package release> : boolean
- <rpm package release> <= <string> : boolean

- `<rpm package release> = <rpm package release>` : boolean
- `<rpm package release> = <string>` : boolean
- `<string> < <rpm package release>` : boolean
- `<string> <= <rpm package release>` : boolean
- `<string> = <rpm package release>` : boolean

## rpm package release with multiplicity

The `<rpm package release with multiplicity>` inspectors deal with arrays of RPM package releases, allowing you to extract unique releases and count them.

### Version Platforms

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX

Creation:

- unique value of `<rpm package release>` : rpm package release with multiplicity

Properties:

- multiplicity of `<rpm package release with multiplicity>` : integer

## rpm package version

The `<rpm package version>` inspectors disclose properties of the RPM package version record inspector. They are collected from the 'Version' component of the Epoch, Version and Release fields associated with an RPM package. The behavior of this inspector differs from a string, because they are sorted according to RPM rules defined by the `rpmvercmp()` function of the RPM library. Do not create an `<rpm package release>` inspector with embedded '-' or whitespace characters. These characters are disallowed in RPM, and will cause the statement to fail.

**Note:** Requires the presence of the RPM library and `librpminfo` (an open source library created by BigFix containing modified RPM library code) on the client machine. `librpminfo` is installed on the client as part of the normal BES client RPM installation procedure.

**Version Platforms**

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX

Creation:

- rpm package version <string> : rpm package version
- version of <rpm package version record> : rpm package version
- version of <short rpm package version record> : rpm package version

Properties:

- extrema of <rpm package version> : ( rpm package version, rpm package version )
- maximum of <rpm package version> : rpm package version
- minimum of <rpm package version> : rpm package version
- rpm package version <rpm package version> : rpm package version
- unique value of <rpm package version> : rpm package version with multiplicity

Casts:

- <rpm package version> as rpm package version : rpm package version
- <rpm package version> as string : string

Operators:

- <rpm package version> < <rpm package version> : boolean
- <rpm package version> < <string> : boolean
- <rpm package version> <= <rpm package version> : boolean
- <rpm package version> <= <string> : boolean
- <rpm package version> = <rpm package version> : boolean
- <rpm package version> = <string> : boolean
- <string> < <rpm package version> : boolean
- <string> <= <rpm package version> : boolean
- <string> = <rpm package version> : boolean

## rpm package version record

The <rpm package version record> inspectors provide version-related information, such as Epoch, Version and Release, for an RPM package. Inspectors of this type are sorted according to an RPM-specific ordering mechanism defined by the rpmVersionCompare() function of the RPM library.

**Note:** Requires the presence of the RPM library and `librpm` (an open source library created by BigFix containing modified RPM library code) on the client machine. `librpm` is installed on the client as part of the normal BES client RPM installation procedure.

### Version Platforms

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX

Creation:

- long form of <short rpm package version record> : rpm package version record
- rpm package version record <string> : rpm package version record
- rpm version record of <package> : rpm package version record
- <short rpm package version record> as rpm package version record : rpm package version record

Properties:

- epoch of <rpm package version record> : integer
- extrema of <rpm package version record> : ( rpm package version record, rpm package version record )
- maximum of <rpm package version record> : rpm package version record
- minimum of <rpm package version record> : rpm package version record
- no epoch of <rpm package version record> : rpm package version record
- release of <rpm package version record> : rpm package release
- rpm package version record <rpm package version record> : rpm package version record
- short form of <rpm package version record> : short rpm package version record

- short rpm package version record <rpm package version record> : short rpm package version record
- unique value of <rpm package version record> : rpm package version record with multiplicity
- version of <rpm package version record> : rpm package version

#### Casts:

- <rpm package version record> as rpm package version record : rpm package version record
- <rpm package version record> as short rpm package version record : short rpm package version record
- <rpm package version record> as string : string

#### Operators:

- <rpm package version record> < <rpm package version record> : boolean
- <rpm package version record> < <short rpm package version record> : boolean
- <rpm package version record> < <string> : boolean
- <rpm package version record> <= <rpm package version record> : boolean
- <rpm package version record> <= <short rpm package version record> : boolean
- <rpm package version record> <= <string> : boolean
- <rpm package version record> = <rpm package version record> : boolean
- <rpm package version record> = <short rpm package version record> : boolean
- <rpm package version record> = <string> : boolean
- <short rpm package version record> < <rpm package version record> : boolean
- <short rpm package version record> <= <rpm package version record> : boolean
- <short rpm package version record> = <rpm package version record> : boolean
- <string> < <rpm package version record> : boolean
- <string> <= <rpm package version record> : boolean
- <string> = <rpm package version record> : boolean

## **rpm package version record with multiplicity**

The <rpm package version record with multiplicity> inspectors deal with arrays of RPM package version records, allowing you to extract unique records and count them.

<b>Version</b>	<b>Platforms</b>
----------------	------------------

8.0.584.0	Red Hat, SUSE
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8.2.1078.0AIX	
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Creation:

- unique value of <rpm package version record> : rpm package version record with multiplicity

Properties:

- multiplicity of <rpm package version record with multiplicity> : integer

## **rpm package version with multiplicity**

The <rpm package version with multiplicity> inspectors deal with arrays of RPM package versions, allowing you to extract unique versions and count them.

<b>Version</b>	<b>Platforms</b>
----------------	------------------

8.0.584.0	Red Hat, SUSE
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8.2.1078.0AIX	
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Creation:

- unique value of <rpm package version> : rpm package version with multiplicity

Properties:

- multiplicity of <rpm package version with multiplicity> : integer



## rpmdatabase

The <rpmdatabase> objects are the Linux RPM Package Manager inspectors. The RPM database contains entries for all the installed programs on this computer.

### Version Platforms

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX

Creation:

- rpm : rpmdatabase
- rpm <string> : rpmdatabase

Properties:

- capability <string> of <rpmdatabase> : capability
- installed <string> of <rpmdatabase> : boolean
- package <string> of <rpmdatabase> : package
- package conflicting with <capability> of <rpmdatabase> : package
- package installing <capability> of <rpmdatabase> : package
- package of <rpmdatabase> : package
- package providing <capability> of <rpmdatabase> : package
- package requiring <capability> of <rpmdatabase> : package

## short rpm package version record

This is the same as an RPM package version record, except that the epoch (if one exists) is not shown when converted to a string. However, even though it isn't displayed, the epoch is still retained. If you need to remove the epoch, use one of the 'no epoch' inspectors.

### Version Platforms

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX

Creation:

- short form of <rpm package version record> : short rpm package version record
- short rpm package version record <rpm package version record> : short rpm package version record
- <rpm package version record> as short rpm package version record : short rpm package version record

#### Properties:

- epoch of <short rpm package version record> : integer
- extrema of <short rpm package version record> : ( short rpm package version record, short rpm package version record )
- long form of <short rpm package version record> : rpm package version record
- maximum of <short rpm package version record> : short rpm package version record
- minimum of <short rpm package version record> : short rpm package version record
- no epoch of <short rpm package version record> : short rpm package version record
- release of <short rpm package version record> : rpm package release
- rpm package version record <short rpm package version record> : rpm package version record
- short rpm package version record <short rpm package version record> : short rpm package version record
- unique value of <short rpm package version record> : short rpm package version record with multiplicity
- version of <short rpm package version record> : rpm package version

#### Casts:

- <short rpm package version record> as rpm package version record : rpm package version record
- <short rpm package version record> as short rpm package version record : short rpm package version record
- <short rpm package version record> as string : string

#### Operators:

- <rpm package version record> < <short rpm package version record> : boolean
- <rpm package version record> <= <short rpm package version record> : boolean
- <rpm package version record> = <short rpm package version record> : boolean
- <short rpm package version record> < <rpm package version record> : boolean
- <short rpm package version record> < <short rpm package version record> : boolean
- <short rpm package version record> <= <rpm package version record> : boolean
- <short rpm package version record> <= <short rpm package version record> : boolean
- <short rpm package version record> = <rpm package version record> : boolean
- <short rpm package version record> = <short rpm package version record> : boolean

### short rpm package version record with multiplicity

The <short rpm package version record with multiplicity> inspectors deal with arrays of short RPM package version records, allowing you to extract unique records and count them.

#### Version Platforms

8.0.584.0 Red Hat, SUSE

8.2.1078.0AIX

Creation:

- unique value of <short rpm package version record> : short rpm package version record with multiplicity

Properties:

- multiplicity of <short rpm package version record with multiplicity> : integer

## SELinux

## SELinux Boolean

<SELinux Boolean> object represents an SELinux Boolean setting. The following relevance shows the list of Booleans and their current statuses similar to the result of running `getsebool -a` command.

```
Q: (name of it, current status of it) of selinux booleans
A: allow_ybind, False
A: allow_smbd_anon_write, False
A: allow_saslauthd_read_shadow, False
A: allow_rsync_anon_write, False
```

### Version            Platforms

9.2.7.53Debian, Red Hat, SUSE, Ubuntu

Creation:

- selinux boolean : SELinux Boolean
- selinux boolean <string> : SELinux Boolean

Properties:

- current status of <SELinux Boolean> : boolean
- name of <SELinux Boolean> : string
- pending status of <SELinux Boolean> : boolean

## Session

### bes comment

The <bes comment> inspectors return the text, timestamp and author of BES Comments.

### Version Platforms

8.0.584.0Session

**Creation:**

- comment of <bes action> : bes comment
- comment of <bes computer> : bes comment
- comment of <bes fixlet> : bes comment

**Properties:**

- author of <bes comment> : bes user
- deleted flag of <bes comment> : boolean
- text of <bes comment> : string
- timestamp of <bes comment> : time

**bes deployment option**

These options allow you to customize the behavior of your BES deployment. They are set by the system administrator in the BES Admin Tool, under the Advanced Options tab.

**Version Platforms**

8.0.584.0Session

**Creation:**

- bes deployment option : bes deployment option
- bes deployment option <string> : bes deployment option

**Properties:**

- database id of <bes deployment option> : integer
- database name of <bes deployment option> : string
- name of <bes deployment option> : string
- value of <bes deployment option> : string

## bes product

A BigFix license can include more than one product. Each product has an expiration date and a maximum seat count for any type of computer, or by non-windows server, windows server, or workstation. Each product also has a name and a list of site urls. For example, a patch management product might include site urls pointing to the individual patch sites.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- product of <license> : bes product

Properties:

- client device count of <bes product> : integer
- computer count of <bes product> : integer
- eula accepted of <bes product> : boolean
- expiration date of <bes product> : date
- legacy of <bes product> : boolean
- mvs count of <bes product> : integer
- name of <bes product> : string
- non windows server count of <bes product> : integer
- perpetual maintenance of <bes product> : boolean
- perpetual of <bes product> : boolean
- rvu count of <bes product> : integer
- site url of <bes product> : string
- term of <bes product> : boolean
- windows server count of <bes product> : integer
- workstation count of <bes product> : integer

## bes server

The <bes server> inspectors return information about the BES Server, allowing Dashboards and Web Reports to access files and other information from the BES database.

### Version Platforms

8.0.584.0Session

Creation:

- current bes server : bes server

Properties:

- database id of <bes server> : integer
- database name of <bes server> : string
- fxf character set of <bes server> : string
- url of <bes server> : string

## bes wakeonlan status

The <bes wakeonlan status> objects are Windows inspectors that return the status of the BES WakeOnLan feature.

### Version Platforms

8.0.584.0Session

Creation:

- bes wakeonlan status : bes wakeonlan status

Properties:

- database id of <bes wakeonlan status> : integer
- database name of <bes wakeonlan status> : string
- enabled of <bes wakeonlan status> : boolean

## **fixlet count pair**

The <fixlet count pair> inspectors return information about the Fixlet count pair objects for each severity level.

### **Version Platforms**

8.0.584.0Session

Creation:

- count map of <historical fixlet count> : fixlet count pair

Properties:

- count of <fixlet count pair> : integer
- source severity of <fixlet count pair> : string

## **historical computer count**

The <historical computer count> inspectors provide information about historical computer count objects.

### **Version Platforms**

8.0.584.0Session

Creation:

- all computer count : historical computer count

Properties:

- count of <historical computer count> : integer
- database id of <historical computer count> : integer
- time of <historical computer count> : time



## historical fixlet count

The <historical fixlet count> objects provide historical information about the number of Fixlets at different severity levels.

### Version Platforms

8.0.584.0Session

Creation:

- all fixlet count : historical fixlet count

Properties:

- count map of <historical fixlet count> : fixlet count pair
- database id of <historical fixlet count> : integer
- time of <historical fixlet count> : time

## mime field

The <mime field> inspectors deal with the MIME fields that constitute a Fixlet file. These fields typically start with 'x-fixlet'. For instance, to return the value of a specific MIME field, you might use:mime fields "x-fixlet-cve" of bes fixlets.

### Version Platforms

8.0.584.0Session

Creation:

- mime field of <bes action> : mime field
- mime field of <bes fixlet> : mime field

Properties:

- name of <mime field> : string
- value of <mime field> : string

## bes webui

No documentation exists.

### Version Platforms

9.5.3.211Session

Creation:

- bes webui : bes webui

## bes webui app

The `bes webui app` type represents a WebUI application.

### Version Platforms

9.2.5.130Session

Creation:

- bes webui app : bes webui app
- element of <bes webui app set> : bes webui app

Properties:

- globally allowed flag of <bes webui app> : boolean
- name of <bes webui app> : string
- set of <bes webui app> : bes webui app set
- unique value of <bes webui app> : bes webui app with multiplicity

Operators:

- <bes webui app set> contains <bes webui app> : boolean
- <bes webui app> = <bes webui app> : boolean

## bes webui app set

The `bes webui app set` type represents a set of WebUI applications.

### Version Platforms

9.2.5.130Session

Creation:

- `bes webui app set` : `bes webui app set`
- `set of <bes webui app>` : `bes webui app set`

Properties:

- `element of <bes webui app set>` : `bes webui app`
- `intersection of <bes webui app set>` : `bes webui app set`
- `size of <bes webui app set>` : `integer`
- `union of <bes webui app set>` : `bes webui app set`

Operators:

- `<bes webui app set> * <bes webui app set>` : `bes webui app set`
- `<bes webui app set> + <bes webui app set>` : `bes webui app set`
- `<bes webui app set> - <bes webui app set>` : `bes webui app set`
- `<bes webui app set> = <bes webui app set>` : `boolean`
- `<bes webui app set> contains <bes webui app set>` : `boolean`
- `<bes webui app set> contains <bes webui app>` : `boolean`

## bes webui app with multiplicity

The `bes webui app with multiplicity` type represents the result of unique values.

### Version Platforms

9.2.5.130Session

Creation:

- unique value of <bes webui app> : bes webui app with multiplicity

Properties:

- multiplicity of <bes webui app with multiplicity> : integer

## bes wizard

The <bes wizard> objects are Console-only inspectors that return a list of the available BES Wizards.

### Version Platforms

8.0.584.0Session

Creation:

- bes wizard : bes wizard
- current wizard : bes wizard
- element of <bes wizard set> : bes wizard
- wizard of <bes site> : bes wizard
- wizard of <bes wizard variable> : bes wizard

Properties:

- charset of <bes wizard> : string
- dashboard id of <bes wizard> : string
- database id of <bes wizard> : integer
- database name of <bes wizard> : string
- default page name of <bes wizard> : string
- dialog flag of <bes wizard> : boolean
- display name of <bes wizard> : string
- document flag of <bes wizard> : boolean
- link <html> of <bes wizard> : html
- link <string> of <bes wizard> : html

- link href of <bes wizard> : string
- link of <bes wizard> : html
- menu path of <bes wizard> : string
- name of <bes wizard> : string
- navbar name of <bes wizard> : string
- pre60 flag of <bes wizard> : boolean
- private variable <string> of <bes wizard> : string
- private variable of <bes wizard> : bes wizard variable
- requires authoring flag of <bes wizard> : boolean
- set of <bes wizard> : bes wizard
- set shared variable <string> of <bes wizard> : string
- shared variable of <bes wizard> : bes wizard
- variable site of <bes wizard> : bes site
- unique value of <bes wizard> : bes wizard with multiplicity
- url of <bes wizard> : string
- variable of <bes wizard> : bes wizard variable

Operators:

- <bes wizard set> contains <bes wizard> : boolean
- <bes wizard> = <bes wizard> : boolean

## bes wizard set

The <bes wizard set> inspectors iterate over the BES Wizards and return a set of such wizards.

### Version Platforms

8.0.584.0Session

Creation:

- bes wizard set : bes wizard set
- set of <bes wizard> : bes wizard set
- wizard set of <bes site> : bes wizard set

## Properties:

- element of <bes wizard set> : bes wizard
- intersection of <bes wizard set> : bes wizard set
- size of <bes wizard set> : integer
- union of <bes wizard set> : bes wizard set

## Operators:

- <bes wizard set> \* <bes wizard set> : bes wizard set
- <bes wizard set> + <bes wizard set> : bes wizard set
- <bes wizard set> - <bes wizard set> : bes wizard set
- <bes wizard set> = <bes wizard set> : boolean
- <bes wizard set> contains <bes wizard set> : boolean
- <bes wizard set> contains <bes wizard> : boolean

## bes wizard variable

The <bes wizard variable> objects are Console-only inspectors that return a list of the available BES Wizard variables.

### Version Platforms

8.0.584.0Session

### Creation:

- private variable of <bes wizard> : bes wizard variable
- shared variable of <bes wizard> : bes wizard variable
- variable of <bes wizard> : bes wizard variable

## Properties:

- name of <bes wizard variable> : string
- private flag of <bes wizard variable> : boolean
- value of <bes wizard variable> : string

- wizard of <bes wizard variable> : bes wizard

## bes wizard with multiplicity

The <bes wizard with multiplicity> inspectors deal with arrays of BES Wizards, allowing you to extract unique properties and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes wizard> : bes wizard with multiplicity

Properties:

- multiplicity of <bes wizard with multiplicity> : integer

## bes user

The <bes user> inspectors let you keep track of the users authorized to use the BES Console. You can iterate over the users, producing lists containing information such as the name and authorization level.

### Version Platforms

8.0.584.0Session

Creation:

- administrator of <bes computer> : bes user
- author of <bes comment> : bes user
- bes user : bes user
- creator of <bes site> : bes user
- current console user : bes user
- element of <bes user set> : bes user
- explicit owner of <bes site> : bes user
- explicit reader of <bes site> : bes user

- explicit writer of <bes site> : bes user
- issuer of <bes action> : bes user
- issuer of <bes activation> : bes user
- issuer of <bes computer group> : bes user
- issuer of <bes fixlet> : bes user
- operator of <bes site> : bes user
- owner of <bes site> : bes user
- reader of <bes site> : bes user
- stopper of <bes action> : bes user
- user of <bes role> : bes user
- writer of <bes site> : bes user

#### Properties:

- action site of <bes user> : bes site
- administered computer of <bes user> : bes computer
- administered computer set of <bes user> : bes computer set
- administrator <( bes computer, bes user )> : boolean
- administrator <( bes user, bes computer )> : boolean
- administrator <bes computer> of <bes user> : boolean
- approver role of <bes user> : bes role
- can create actions flag of <bes user> : boolean
- can lock flag of <bes user> : boolean
- can send multiple refresh flag of <bes user> : boolean
- can submit queries flag of <bes user> : boolean
- creation time of <bes user> : time
- custom content flag of <bes user> : boolean
- distinguished name of <bes user> : string
- id of <bes user> : integer
- issued action of <bes user> : bes action
- issued action set of <bes user> : bes action set
- issued computer group of <bes user> : bes computer group
- issued computer group set of <bes user> : bes computer group set



- issued fixlet of <bes user> : bes fixlet
- issued fixlet set of <bes user> : bes fixlet set
- last login time of <bes user> : time
- ldap directory of <bes user> : bes ldap directory
- link <html> of <bes user> : html
- link <string> of <bes user> : html
- link href of <bes user> : string
- link of <bes user> : html
- master flag of <bes user> : boolean
- masthead operator name of <bes user> : string
- name of <bes user> : string
- operator site of <bes user> : bes site
- restartandshutdown actionscript privilege allowboth flag of <bes user> : boolean
- restartandshutdown actionscript privilege allowrestartonly flag of <bes user> : boolean
- restartandshutdown actionscript privilege none flag of <bes user> : boolean
- restartandshutdown postaction privilege allowboth flag of <bes user> : boolean
- restartandshutdown postaction privilege allowrestartonly flag of <bes user> : boolean
- restartandshutdown postaction privilege none flag of <bes user> : boolean
- role of <bes user> : bes role
- role set of <bes user> : bes role set
- set of <bes user> : bes user set
- show other action flag of <bes user> : boolean
- stop other actions flag of <bes user> : boolean
- unique value of <bes user> : bes user with multiplicity
- unmanagedasset privilege scanpoint flag of <bes user> : boolean
- unmanagedasset privilege showall flag of <bes user> : boolean
- unmanagedasset privilege shownone flag of <bes user> : boolean

#### Operators:

- <bes user set> contains <bes user> : boolean
- <bes user> = <bes user> : boolean

## bes user set

The <bes user set> inspectors iterate over the current set of BES users and package them as a mathematical set, suitable for further set manipulation.

### Version Platforms

8.0.584.0Session

Creation:

- administrator set of <bes computer> : bes user set
- bes user set : bes user set
- explicit owner set of <bes site> : bes user set
- explicit reader set of <bes site> : bes user set
- explicit writer set of <bes site> : bes user set
- owner set of <bes site> : bes user set
- reader set of <bes site> : bes user set
- set of <bes user> : bes user set
- user set of <bes filter> : bes user set
- user set of <bes role> : bes user set
- writer set of <bes site> : bes user set

Properties:

- element of <bes user set> : bes user
- intersection of <bes user set> : bes user set
- size of <bes user set> : integer
- union of <bes user set> : bes user set

Operators:

- <bes user set> \* <bes user set> : bes user set
- <bes user set> + <bes user set> : bes user set
- <bes user set> - <bes user set> : bes user set
- <bes user set> = <bes user set> : boolean

- <bes user set> contains <bes user set> : boolean
- <bes user set> contains <bes user> : boolean

## bes user with multiplicity

The <bes user with multiplicity> inspectors deal with arrays of BES users, allowing you to extract unique users and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes user> : bes user with multiplicity

Properties:

- multiplicity of <bes user with multiplicity> : integer

## bes unmanagedasset

The <bes unmanagedasset> inspectors provide access to externally sourced data, such as that resulting from Nmap scans on client computers. The results, such as OS, Device Type, Network Card Vendor, and Open Ports, are uploaded to the BES Server for storage and analysis. These inspectors provide a way to monitor and report on mobile or hand-held devices that are not traditional BES Clients, but instead use "microAgents" to report their status. For more information on currently supported devices, consult the BigFix support pages.

### Version Platforms

8.0.584.0Session

Creation:

- asset of <bes unmanagedasset field> : bes unmanagedasset
- bes unmanagedasset : bes unmanagedasset
- current unmanagedasset : bes unmanagedasset

- element of <bes unmanagedasset set> : bes unmanagedasset

#### Properties:

- client installed flag of <bes unmanagedasset> : boolean
- field of <bes unmanagedasset> : bes unmanagedasset field
- id of <bes unmanagedasset> : integer
- link <html> of <bes unmanagedasset> : html
- link <string> of <bes unmanagedasset> : html
- link href of <bes unmanagedasset> : string
- link of <bes unmanagedasset> : html
- set of <bes unmanagedasset> : bes unmanagedasset set
- source of <bes unmanagedasset> : string
- unique value of <bes unmanagedasset> : bes unmanagedasset with multiplicity

#### Operators:

- <bes unmanagedasset set> contains <bes unmanagedasset> : boolean
- <bes unmanagedasset> = <bes unmanagedasset> : boolean

## bes unmanagedasset field

The <bes unmanagedasset field> inspectors provide authors with access to the individual fields of various unmanaged assets. Each field consists of a name / value pair, analogous to BES properties. There are three types of fields:

- IdentifyingField:** Each asset must have one IdentifyingField, such as a MAC Address, which is used to identify and correlate different reports from the same asset.
- FilterableField:** These are displayed in the Console in both the Unmanaged Asset list and the unmanaged asset document, allowing sorting and filtering.
- NonFilterable:** These are only displayed in the Unmanaged Assets document, and typically return a large amount of data, such as a list of vulnerabilities.

### Version Platforms

8.0.584.0Session

Creation:

- field of <bes unmanagedasset> : bes unmanagedasset field

#### Properties:

- asset of <bes unmanagedasset field> : bes unmanagedasset
- editable flag of <bes unmanagedasset field> : boolean
- filterable flag of <bes unmanagedasset field> : boolean
- name of <bes unmanagedasset field> : string
- value of <bes unmanagedasset field> : string

## bes unmanagedasset set

The <bes unmanagedasset set> inspectors iterate over the BES unmanaged assets and return a set of such assets.

### Version Platforms

8.0.584.0Session

#### Creation:

- bes unmanagedasset set : bes unmanagedasset set
- set of <bes unmanagedasset> : bes unmanagedasset set

#### Properties:

- element of <bes unmanagedasset set> : bes unmanagedasset
- intersection of <bes unmanagedasset set> : bes unmanagedasset set
- size of <bes unmanagedasset set> : integer
- union of <bes unmanagedasset set> : bes unmanagedasset set

#### Operators:

- <bes unmanagedasset set> \* <bes unmanagedasset set> : bes unmanagedasset set
- <bes unmanagedasset set> + <bes unmanagedasset set> : bes unmanagedasset set
- <bes unmanagedasset set> - <bes unmanagedasset set> : bes unmanagedasset set

- <bes unmanagedasset set> = <bes unmanagedasset set> : boolean
- <bes unmanagedasset set> contains <bes unmanagedasset set> : boolean
- <bes unmanagedasset set> contains <bes unmanagedasset> : boolean

## **bes unmanagedasset with multiplicity**

The <bes unmanagedasset with multiplicity> inspectors deal with arrays of BES unmanaged assets, allowing you to extract unique properties and count them.

### **Version Platforms**

8.0.584.0Session

Creation:

- unique value of <bes unmanagedasset> : bes unmanagedasset with multiplicity

Properties:

- multiplicity of <bes unmanagedasset with multiplicity> : integer

## **bes site**

The site inspectors return the names and IDs of the specified site objects. As of BES 7.0, the BES custom site type has been merged with BES site, which now represents all supported types, including external sites, master action sites, operator sites, and custom sites. All properties of BES custom site are now accessible via BES site. As a compatibility measure, BES sites still returns only external and master action sites.

### **Version Platforms**

8.0.584.0Session

Creation:

- action site of <bes user> : bes site
- all bes site : bes site
- bes custom site : bes site
- bes site : bes site

- current bes site : bes site
- custom site of <bes domain> : bes site
- custom site of <bes fixlet> : bes site
- element of <bes site set> : bes site
- operator site of <bes user> : bes site
- site of <bes computer group> : bes site
- site of <bes fixlet> : bes site
- site of <bes wizard> : bes site
- subscribed site of <bes computer> : bes site

#### Properties:

- action of <bes site> : bes action
- action set of <bes site> : bes action set
- creation date of <bes site> : time
- creator of <bes site> : bes user
- custom site flag of <bes site> : boolean
- description of <bes site> : string
- display name of <bes site> : string
- domain of <bes site> : bes domain
- domain set of <bes site> : bes domain set
- explicit owner of <bes site> : bes user
- explicit owner set of <bes site> : bes user set
- explicit reader of <bes site> : bes user
- explicit reader set of <bes site> : bes user set
- explicit writer of <bes site> : bes user
- explicit writer set of <bes site> : bes user set
- external site flag of <bes site> : boolean
- fixlet <integer> of <bes site> : bes fixlet
- fixlet of <bes site> : bes fixlet
- fixlet set of <bes site> : bes fixlet set
- globally readable flag of <bes site> : boolean
- id of <bes site> : integer

- master site flag of <bes site> : boolean
- name of <bes site> : string
- operator of <bes site> : bes user
- operator site flag of <bes site> : boolean
- owner flag <bes user> of <bes site> : boolean
- owner of <bes site> : bes user
- owner set of <bes site> : bes user set
- reader of <bes site> : bes user
- reader set of <bes site> : bes user set
- set of <bes site> : bes site set
- site file of <bes site> : bes site file
- site file set of <bes site> : bes site file set
- site level relevance of <bes site> : string
- subscribed <( bes computer, bes site )> : boolean
- subscribed <( bes site, bes computer )> : boolean
- subscribed <bes computer> of <bes site> : boolean
- subscribed computer of <bes site> : bes computer
- subscribed computer set of <bes site> : bes computer set
- subscription mode of <bes site> : string
- tag of <bes site> : string
- unique value of <bes site> : bes site with multiplicity
- url of <bes site> : string
- version of <bes site> : integer
- wizard of <bes site> : bes wizard
- wizard set of <bes site> : bes wizard set
- writer of <bes site> : bes user
- writer set of <bes site> : bes user set

#### Operators:

- <bes site set> contains <bes site> : boolean
- <bes site> = <bes site> : boolean



## bes site set

The <bes site set> inspectors iterate over the BES sites and return a set of such sites.

### Version Platforms

8.0.584.0Session

Creation:

- custom site set of <bes domain> : bes site set
- set of <bes site> : bes site set
- subscribed site set of <bes computer> : bes site set

Properties:

- element of <bes site set> : bes site
- intersection of <bes site set> : bes site set
- size of <bes site set> : integer
- union of <bes site set> : bes site set

Operators:

- <bes site set> \* <bes site set> : bes site set
- <bes site set> + <bes site set> : bes site set
- <bes site set> - <bes site set> : bes site set
- <bes site set> = <bes site set> : boolean
- <bes site set> contains <bes site set> : boolean
- <bes site set> contains <bes site> : boolean

## bes site with multiplicity

The <bes site with multiplicity> inspectors deal with arrays of BES sites, allowing you to extract unique properties and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes site> : bes site with multiplicity

Properties:

- multiplicity of <bes site with multiplicity> : integer

## **bes client setting**

The <bes client setting> inspectors return the name, value and scope of BES Client settings. These are named variables that are used to report on and control various client behaviors.

### **Version Platforms**

8.0.584.0Session

Creation:

- client setting of <bes computer> : bes client setting

Properties:

- name of <bes client setting> : string
- scope of <bes client setting> : string
- value of <bes client setting> : string

## **bes computer**

The <bes computer> inspectors return lists of the computers currently visible through the BES Console.

### **Version Platforms**

8.0.584.0Session

Creation:

- administered computer of <bes user> : bes computer

- applicable computer of <bes fixlet> : bes computer
- bes computer : bes computer
- bes computer <integer> : bes computer
- computer of <bes action result> : bes computer
- computer of <bes fixlet result> : bes computer
- computer of <bes property result> : bes computer
- current computer : bes computer
- element of <bes computer set> : bes computer
- member of <bes computer group> : bes computer
- subscribed computer of <bes site> : bes computer
- targeted computer of <bes action> : bes computer

#### Properties:

- action result of <bes computer> : bes action result
- active directory path of <bes computer> : distinguished name
- administrator <( bes computer, bes user )> : boolean
- administrator <( bes user, bes computer )> : boolean
- administrator <bes user> of <bes computer> : boolean
- administrator of <bes computer> : bes user
- administrator set of <bes computer> : bes user set
- agent type of <bes computer> : string
- agent version of <bes computer> : string
- bes computer group of <bes computer> : bes computer group
- bes computer group set of <bes computer> : bes computer group set
- client setting of <bes computer> : bes client setting
- comment of <bes computer> : bes comment
- correlation flag of <bes computer> : boolean
- correlation of <bes computer> : bes computer
- cpu of <bes computer> : string
- database id of <bes computer> : integer
- database name of <bes computer> : string
- device type of <bes computer> : string

- extension flag of <bes computer> : boolean
- hostname of <bes computer> : string
- id of <bes computer> : integer
- ip address of <bes computer> : ipv4or6 address
- last report time of <bes computer> : time
- license type of <bes computer> : string
- link <html> of <bes computer> : html
- link <string> of <bes computer> : html
- link href of <bes computer> : string
- link of <bes computer> : html
- locked flag of <bes computer> : boolean
- management extension of <bes computer> : string
- name of <bes computer> : string
- operating system of <bes computer> : string
- property result of <bes computer> : bes property result
- relay distance of <bes computer> : integer
- relay hostname of <bes computer> : string
- relay selection method of <bes computer> : string
- relay server flag of <bes computer> : boolean
- relay server of <bes computer> : string
- relevant <( bes computer, bes fixlet )> : boolean
- relevant <( bes fixlet, bes computer )> : boolean
- relevant <bes fixlet> of <bes computer> : boolean
- relevant fixlet of <bes computer> : bes fixlet
- relevant fixlet set of <bes computer> : bes fixlet set
- reported action set of <bes computer> : bes action set
- reported property set of <bes computer> : bes property set
- result <( bes action, bes computer )> : bes action result
- result <( bes computer, bes action )> : bes action result
- result <( bes computer, bes fixlet )> : bes fixlet result
- result <( bes computer, bes property )> : bes property result
- result <( bes fixlet, bes computer )> : bes fixlet result

- result <( bes property, bes computer )> : bes property result
- result from <bes action> of <bes computer> : bes action result
- result from <bes fixlet> of <bes computer> : bes fixlet result
- result from <bes property> of <bes computer> : bes property result
- root server flag of <bes computer> : boolean
- root server of <bes computer> : string
- set of <bes computer> : bes computer set
- subscribed <( bes computer, bes site )> : boolean
- subscribed <( bes site, bes computer )> : boolean
- subscribed <bes site> of <bes computer> : boolean
- subscribed site of <bes computer> : bes site
- subscribed site set of <bes computer> : bes site set
- unique value of <bes computer> : bes computer with multiplicity

#### Operators:

- <bes computer set> contains <bes computer> : boolean
- <bes computer> = <bes computer> : boolean

## bes computer group

The <bes computer group> inspectors return an iterated list of computer groups, as defined in the BES Console.

### Version Platforms

8.0.584.0Session

#### Creation:

- bes computer group : bes computer group
- bes computer group of <bes computer> : bes computer group
- computer group of <bes domain> : bes computer group
- element of <bes computer group set> : bes computer group
- issued computer group of <bes user> : bes computer group

## Properties:

- automatic flag of <bes computer group> : boolean
- client evaluated flag of <bes computer group> : boolean
- creation time of <bes computer group> : time
- database id of <bes computer group> : integer
- domain of <bes computer group> : bes domain
- id of <bes computer group> : integer
- issuer of <bes computer group> : bes user
- manual flag of <bes computer group> : boolean
- member of <bes computer group> : bes computer
- member set of <bes computer group> : bes computer set
- name of <bes computer group> : string
- set of <bes computer group> : bes computer group set
- site of <bes computer group> : bes site
- unique value of <bes computer group> : bes computer group with multiplicity

## Casts:

- <bes computer group> as xml : utf8 string

## Operators:

- <bes computer group set> contains <bes computer group> : boolean
- <bes computer group> = <bes computer group> : boolean

## bes computer group set

The <bes computer group set> inspectors convert an iterated list of computer groups into a set, which allows you to perform intersections, unions and other mathematical operations on them.

### Version Platforms

8.0.584.0Session

### Creation:

- bes computer group set : bes computer group set
- bes computer group set of <bes computer> : bes computer group set
- computer group set of <bes domain> : bes computer group set
- issued computer group set of <bes user> : bes computer group set
- set of <bes computer group> : bes computer group set

### Properties:

- element of <bes computer group set> : bes computer group
- intersection of <bes computer group set> : bes computer group set
- size of <bes computer group set> : integer
- union of <bes computer group set> : bes computer group set

### Casts:

- <bes computer group set> as xml : utf8 string

### Operators:

- <bes computer group set> \* <bes computer group set> : bes computer group set
- <bes computer group set> + <bes computer group set> : bes computer group set
- <bes computer group set> - <bes computer group set> : bes computer group set
- <bes computer group set> = <bes computer group set> : boolean
- <bes computer group set> contains <bes computer group set> : boolean
- <bes computer group set> contains <bes computer group> : boolean

## bes computer group with multiplicity

The <bes computer group with multiplicity> inspectors deal with arrays of BES computer groups, allowing you to extract unique computer groups and count them.

### Version Platforms

8.0.584.0Session

#### Creation:

- unique value of <bes computer group> : bes computer group with multiplicity

#### Properties:

- multiplicity of <bes computer group with multiplicity> : integer

## bes computer set

The <bes computer set> inspectors convert an iterated list of computers into a set, which allows you to perform intersections, unions and other mathematical operations on them.

### Version Platforms

8.0.584.0Session

#### Creation:

- administered computer set of <bes user> : bes computer set
- applicable computer set of <bes baseline component> : bes computer set
- applicable computer set of <bes fixlet> : bes computer set
- bes computer set : bes computer set
- computer set of <bes filter> : bes computer set
- member set of <bes computer group> : bes computer set
- reported computer set of <bes action> : bes computer set
- reported computer set of <bes property> : bes computer set
- set of <bes computer> : bes computer set
- subscribed computer set of <bes site> : bes computer set
- targeted computer set of <bes action> : bes computer set
- unknown computer set of <bes baseline component> : bes computer set

#### Properties:

- element of <bes computer set> : bes computer
- intersection of <bes computer set> : bes computer set



- size of <bes computer set> : integer
- union of <bes computer set> : bes computer set

Operators:

- <bes computer set> \* <bes computer set> : bes computer set
- <bes computer set> + <bes computer set> : bes computer set
- <bes computer set> - <bes computer set> : bes computer set
- <bes computer set> = <bes computer set> : boolean
- <bes computer set> contains <bes computer set> : boolean
- <bes computer set> contains <bes computer> : boolean

## bes computer with multiplicity

The <bes computer with multiplicity> inspectors deal with arrays of BES computers, allowing you to extract unique computers and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes computer> : bes computer with multiplicity

Properties:

- multiplicity of <bes computer with multiplicity> : integer

## bes computer with extensions

The <bes computer with extensions> inspectors return all the bes computers along with their extensions, if any.

### Version Platforms

10.0.0.0Session

## bes computer with extensions set

The <bes computer with extensions set> inspectors return all the bes computers along with their extensions, if any. The resulting list is converted into a set to make it easier to do set arithmetic with it.

### VersionPlatforms

10.0.0.0Session

## bes property

The <bes property> inspectors return information about the properties of BES Client computers. Properties -- along with their names, IDs and definitions -- can be iterated to produce property lists of all your networked BES computers.

### Version Platforms

8.0.584.0Session

Creation:

- bes property : bes property
- bes property <string> : bes property
- element of <bes property set> : bes property
- property <integer> of <bes fixlet> : bes property
- property of <bes fixlet> : bes property
- property of <bes property result> : bes property

Properties:

- analysis flag of <bes property> : boolean
- category of <bes property> : string
- custom flag of <bes property> : boolean
- database id of <bes property> : integer
- default flag of <bes property> : boolean
- definition of <bes property> : string

- disk usage of <bes property> : integer
- display category of <bes property> : string
- display name of <bes property> : string
- display simple name of <bes property> : string
- evaluation period of <bes property> : time interval
- id of <bes property> : ( integer, integer, integer )
- keep statistics flag of <bes property> : boolean
- memory usage of <bes property> : integer
- name of <bes property> : string
- reported computer set of <bes property> : bes computer set
- reserved flag of <bes property> : boolean
- result <( bes computer, bes property )> : bes property result
- result <( bes property, bes computer )> : bes property result
- result from <bes computer> of <bes property> : bes property result
- result of <bes property> : bes property result
- set of <bes property> : bes property set
- simple name of <bes property> : string
- source analysis of <bes property> : bes fixlet
- source evaluation period of <bes property> : time interval
- source id of <bes property> : integer
- source name of <bes property> : string
- statistic range of <bes property> : statistic range
- unique value of <bes property> : bes property with multiplicity

#### Casts:

- <bes property> as xml : utf8 string

#### Operators:

- <bes property set> contains <bes property> : boolean
- <bes property> = <bes property> : boolean

## bes property result

The <bes property result> inspectors return the results returned by the given properties of the specified BES Client computers.

### Version Platforms

8.0.584.0Session

Creation:

- property result of <bes computer> : bes property result
- result <( bes computer, bes property )> : bes property result
- result <( bes property, bes computer )> : bes property result
- result from <bes computer> of <bes property> : bes property result
- result from <bes property> of <bes computer> : bes property result
- result of <bes property> : bes property result

Properties:

- computer of <bes property result> : bes computer
- error flag of <bes property result> : boolean
- error message of <bes property result> : string
- plural flag of <bes property result> : boolean
- property of <bes property result> : bes property
- value count of <bes property result> : integer
- value of <bes property result> : string

## bes property set

The <bes property set> inspectors iterate over the current set of BES properties and package them as a mathematical set, suitable for further set manipulation.

### Version Platforms

8.0.584.0Session

Creation:

- bes property set : bes property set
- reported property set of <bes computer> : bes property set
- set of <bes property> : bes property set

#### Properties:

- element of <bes property set> : bes property
- intersection of <bes property set> : bes property set
- size of <bes property set> : integer
- union of <bes property set> : bes property set

#### Casts:

- <bes property set> as xml : utf8 string

#### Operators:

- <bes property set> \* <bes property set> : bes property set
- <bes property set> + <bes property set> : bes property set
- <bes property set> - <bes property set> : bes property set
- <bes property set> = <bes property set> : boolean
- <bes property set> contains <bes property set> : boolean
- <bes property set> contains <bes property> : boolean

## bes property with multiplicity

The <bes property with multiplicity> inspectors deal with arrays of BES properties, allowing you to extract unique properties and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes property> : bes property with multiplicity

Properties:

- multiplicity of <bes property with multiplicity> : integer

## **bes activation**

The <bes activation> inspectors examine the various Analyses that have been activated on the networked BES Clients.

### **Version Platforms**

8.0.584.0Session

Creation:

- activation of <bes fixlet> : bes activation
- best activation of <bes fixlet> : bes activation

Properties:

- active flag of <bes activation> : boolean
- analysis of <bes activation> : bes fixlet
- creation time of <bes activation> : time
- database id of <bes activation> : integer
- id of <bes activation> : integer
- issuer of <bes activation> : bes user
- modification time of <bes activation> : time
- name of <bes activation> : string
- status of <bes activation> : string

## **bes baseline component**

The <bes baseline component> inspectors return the individual components of a Baseline, such as Fixlets, Tasks or other Baselines.

### **Version Platforms**

8.0.584.0Session

**Creation:**

- component of <bes baseline component group> : bes baseline component

**Properties:**

- action of <bes baseline component> : bes fixlet action
- applicable computer count of <bes baseline component> : integer
- applicable computer set of <bes baseline component> : bes computer set
- id of <bes baseline component> : integer
- include in relevance flag of <bes baseline component> : boolean
- name of <bes baseline component> : string
- relevance of <bes baseline component> : string
- source fixlet of <bes baseline component> : bes fixlet
- unknown computer count of <bes baseline component> : integer
- unknown computer set of <bes baseline component> : bes computer set

**bes baseline component group**

Baselines provide a method of grouping Actions from multiple Fixlets, Tasks, or other Baselines. Once a Baseline is defined (in the BES Console) the Actions are all grouped for simultaneous application. This technique allows you to form natural groupings of Actions for a single-click deployment.

**Version Platforms**

8.0.584.0Session

**Creation:**

- component group of <bes fixlet> : bes baseline component group

**Properties:**

- component of <bes baseline component group> : bes baseline component
- name of <bes baseline component group> : string

## bes filter

The <bes filter> inspectors return the filters, which represent the criteria used by the Find command (Ctrl-F in the BES Console). The filters are specific to computers, computer groups, Actions, Analyses, Baselines, Unmanaged Assets, Users, Tasks or Fixlets, and are appropriately flagged.

### Version Platforms

8.0.584.0Session

Creation:

- bes filter : bes filter
- bes filter <integer> : bes filter
- element of <bes filter set> : bes filter
- filter of <bes domain> : bes filter

Properties:

- action flag of <bes filter> : boolean
- action set of <bes filter> : bes action set
- analysis flag of <bes filter> : boolean
- analysis set of <bes filter> : bes fixlet set
- baseline flag of <bes filter> : boolean
- baseline set of <bes filter> : bes fixlet set
- computer flag of <bes filter> : boolean
- computer group set of <bes filter> : bes fixlet set
- computer set of <bes filter> : bes computer set
- domain of <bes filter> : bes domain
- fixlet flag of <bes filter> : boolean
- fixlet set of <bes filter> : bes fixlet set
- group flag of <bes filter> : boolean
- id of <bes filter> : integer
- join by intersection flag of <bes filter> : boolean



- name of <bes filter> : string
- private flag of <bes filter> : boolean
- set of <bes filter> : bes filter set
- task flag of <bes filter> : boolean
- task set of <bes filter> : bes fixlet set
- unique value of <bes filter> : bes filter with multiplicity
- unmanagedasset flag of <bes filter> : boolean
- user flag of <bes filter> : boolean
- user set of <bes filter> : bes user set

Operators:

- <bes filter set> contains <bes filter> : boolean
- <bes filter> = <bes filter> : boolean

## bes filter set

The <bes filter set> inspectors return the iterated list of BES Filters, converted into a set to make it easy to do set arithmetic with the list.

### Version Platforms

8.0.584.0Session

Creation:

- bes filter set : bes filter set
- filter set of <bes domain> : bes filter set
- set of <bes filter> : bes filter set

Properties:

- element of <bes filter set> : bes filter
- intersection of <bes filter set> : bes filter set
- size of <bes filter set> : integer
- union of <bes filter set> : bes filter set

Operators:

- <bes filter set> \* <bes filter set> : bes filter set
- <bes filter set> + <bes filter set> : bes filter set
- <bes filter set> - <bes filter set> : bes filter set
- <bes filter set> = <bes filter set> : boolean
- <bes filter set> contains <bes filter set> : boolean
- <bes filter set> contains <bes filter> : boolean

## bes filter with multiplicity

The <bes filter with multiplicity> inspectors deal with arrays of BES filters, allowing you to extract unique filters and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes filter> : bes filter with multiplicity

Properties:

- multiplicity of <bes filter with multiplicity> : integer

## bes fixlet

The <bes fixlet> inspectors allow you to iterate over the BES fixlets to create lists of various Fixlet properties such as name, ID, site, and more.

### Version Platforms

8.0.584.0Session

Creation:

- analysis of <bes activation> : bes fixlet
- bes analysis : bes fixlet

- bes baseline : bes fixlet
- bes fixlet : bes fixlet
- bes task : bes fixlet
- current analysis : bes fixlet
- current fixlet : bes fixlet
- current task : bes fixlet
- custom bes fixlet : bes fixlet
- custom fixlet of <bes domain> : bes fixlet
- element of <bes fixlet set> : bes fixlet
- fixlet <integer> of <bes site> : bes fixlet
- fixlet of <bes fixlet result> : bes fixlet
- fixlet of <bes site> : bes fixlet
- issued fixlet of <bes user> : bes fixlet
- plain bes fixlet : bes fixlet
- relevant fixlet of <bes computer> : bes fixlet
- source analysis of <bes property> : bes fixlet
- source fixlet of <bes action> : bes fixlet
- source fixlet of <bes baseline component> : bes fixlet

#### Properties:

- action <integer> of <bes fixlet> : bes fixlet action
- action <string> of <bes fixlet> : bes fixlet action
- action of <bes fixlet> : bes fixlet action
- activation of <bes fixlet> : bes activation
- analysis flag of <bes fixlet> : boolean
- applicable computer count of <bes fixlet> : integer
- applicable computer of <bes fixlet> : bes computer
- applicable computer set of <bes fixlet> : bes computer set
- baseline flag of <bes fixlet> : boolean
- best activation of <bes fixlet> : bes activation
- body of <bes fixlet> : html
- category of <bes fixlet> : string

- charset of <bes fixlet> : string
- comment of <bes fixlet> : bes comment
- component group of <bes fixlet> : bes baseline component group
- components xml of <bes fixlet> : string
- creation time of <bes fixlet> : time
- custom flag of <bes fixlet> : boolean
- custom site flag of <bes fixlet> : boolean
- custom site of <bes fixlet> : bes site
- cve id list of <bes fixlet> : string
- default action of <bes fixlet> : bes fixlet action
- digest file name of <bes fixlet> : string
- display category of <bes fixlet> : string
- display message of <bes fixlet> : html
- display name of <bes fixlet> : string
- display source id of <bes fixlet> : string
- display source of <bes fixlet> : string
- display source severity of <bes fixlet> : string
- domain of <bes fixlet> : bes domain
- download size of <bes fixlet> : integer
- field <string> of <bes fixlet> : bes fixlet field
- field of <bes fixlet> : bes fixlet field
- fixlet flag of <bes fixlet> : boolean
- globally visible flag of <bes fixlet> : boolean
- group flag of <bes fixlet> : boolean
- id of <bes fixlet> : integer
- issuer of <bes fixlet> : bes user
- link <html> of <bes fixlet> : html
- link <string> of <bes fixlet> : html
- link href of <bes fixlet> : string
- link of <bes fixlet> : html
- locally visible flag of <bes fixlet> : boolean
- master site flag of <bes fixlet> : boolean

- message of <bes fixlet> : html
- mime field <string> of <bes fixlet> : string
- mime field of <bes fixlet> : mime field
- modification time of <bes fixlet> : time
- name of <bes fixlet> : string
- open action count of <bes fixlet> : integer
- operator site flag of <bes fixlet> : boolean
- parent relevance of <bes fixlet> : string
- property <integer> of <bes fixlet> : bes property
- property of <bes fixlet> : bes property
- relevance clause of <bes fixlet> : string
- relevance of <bes fixlet> : string
- relevant <( bes computer, bes fixlet )> : boolean
- relevant <( bes fixlet, bes computer )> : boolean
- relevant <bes computer> of <bes fixlet> : boolean
- result <( bes computer, bes fixlet )> : bes fixlet result
- result <( bes fixlet, bes computer )> : bes fixlet result
- result from <bes computer> of <bes fixlet> : bes fixlet result
- result of <bes fixlet> : bes fixlet result
- sans id list of <bes fixlet> : string
- set of <bes fixlet> : bes fixlet set
- site of <bes fixlet> : bes site
- source id of <bes fixlet> : string
- source of <bes fixlet> : string
- source release date of <bes fixlet> : date
- source severity of <bes fixlet> : string
- taken action of <bes fixlet> : bes action
- taken action set of <bes fixlet> : bes action set
- task flag of <bes fixlet> : boolean
- type of <bes fixlet> : string
- unique value of <bes fixlet> : bes fixlet with multiplicity
- unlocked computer count of <bes fixlet> : integer

- visible flag of <bes fixlet> : boolean
- wizard data of <bes fixlet> : html
- wizard link of <bes fixlet> : string
- wizard name of <bes fixlet> : string

Casts:

- <bes fixlet> as xml : utf8 string

Operators:

- <bes fixlet set> contains <bes fixlet> : boolean
- <bes fixlet> = <bes fixlet> : boolean

## bes fixlet action

The <bes fixlet action> inspectors let you examine BES Actions that are attached to fixlets.

### Version Platforms

8.0.584.0Session

Creation:

- action <integer> of <bes fixlet> : bes fixlet action
- action <string> of <bes fixlet> : bes fixlet action
- action of <bes baseline component> : bes fixlet action
- action of <bes fixlet> : bes fixlet action
- default action of <bes fixlet> : bes fixlet action

Properties:

- content id of <bes fixlet action> : string
- custom success relevance of <bes fixlet action> : string
- script of <bes fixlet action> : string
- script type of <bes fixlet action> : string
- success on custom relevance of <bes fixlet action> : boolean

- success on original relevance of <bes fixlet action> : boolean
- success on run to completion of <bes fixlet action> : boolean

## bes fixlet field

In addition to the Relevance and Action fields, fixlets and Tasks can contain various additional fields. If the content is developed in BDE, these fields may be specified by the Fixlet templates you use. Depending on the site or the template, fields may have different interpretations.

### Version Platforms

8.0.584.0Session

Creation:

- field <string> of <bes fixlet> : bes fixlet field
- field of <bes fixlet> : bes fixlet field

Properties:

- name of <bes fixlet field> : string
- value of <bes fixlet field> : bes fixlet field value

## bes fixlet field value

The <bes fixlet field value> inspectors provide access to the values of informational fields that are included with some fixlets and Tasks. For more information, see the BES Fixlet field inspectors.

### Version Platforms

8.0.584.0Session

Creation:

- value of <bes fixlet field> : bes fixlet field value

Properties:

- display value of <bes fixlet field value> : string

#### Casts:

- <bes fixlet field value> as date : date
- <bes fixlet field value> as integer : integer
- <bes fixlet field value> as string : string
- <bes fixlet field value> as time : time

## bes fixlet result

The <bes fixlet result> inspectors allow you to inspect the results of BES fixlets, including relevance and affected computers.

### Version Platforms

8.0.584.0Session

#### Creation:

- result <( bes computer, bes fixlet )> : bes fixlet result
- result <( bes fixlet, bes computer )> : bes fixlet result
- result from <bes computer> of <bes fixlet> : bes fixlet result
- result from <bes fixlet> of <bes computer> : bes fixlet result
- result of <bes fixlet> : bes fixlet result

#### Properties:

- computer of <bes fixlet result> : bes computer
- first became relevant of <bes fixlet result> : time
- fixlet of <bes fixlet result> : bes fixlet
- last became nonrelevant of <bes fixlet result> : time
- last became relevant of <bes fixlet result> : time
- relevant flag of <bes fixlet result> : boolean
- remediated flag of <bes fixlet result> : boolean



## bes fixlet set

The <bes fixlet set> inspectors iterate over the current set of BES Fixlets and package them as a mathematical set, suitable for further set manipulation.

### Version Platforms

8.0.584.0Session

Creation:

- analysis set of <bes filter> : bes fixlet set
- baseline set of <bes filter> : bes fixlet set
- bes analysis set : bes fixlet set
- bes baseline set : bes fixlet set
- bes fixlet set : bes fixlet set
- bes task set : bes fixlet set
- computer group set of <bes filter> : bes fixlet set
- custom bes fixlet set : bes fixlet set
- custom fixlet set of <bes domain> : bes fixlet set
- fixlet set of <bes filter> : bes fixlet set
- fixlet set of <bes site> : bes fixlet set
- issued fixlet set of <bes user> : bes fixlet set
- plain bes fixlet set : bes fixlet set
- relevant fixlet set of <bes computer> : bes fixlet set
- set of <bes fixlet> : bes fixlet set
- task set of <bes filter> : bes fixlet set

Properties:

- element of <bes fixlet set> : bes fixlet
- intersection of <bes fixlet set> : bes fixlet set
- size of <bes fixlet set> : integer
- union of <bes fixlet set> : bes fixlet set

Casts:

- <bes fixlet set> as xml : utf8 string

Operators:

- <bes fixlet set> \* <bes fixlet set> : bes fixlet set
- <bes fixlet set> + <bes fixlet set> : bes fixlet set
- <bes fixlet set> - <bes fixlet set> : bes fixlet set
- <bes fixlet set> = <bes fixlet set> : boolean
- <bes fixlet set> contains <bes fixlet set> : boolean
- <bes fixlet set> contains <bes fixlet> : boolean

## bes fixlet with multiplicity

The <bes fixlet with multiplicity> inspectors deal with arrays of BES fixlets, allowing you to extract unique fixlets and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes fixlet> : bes fixlet with multiplicity

Properties:

- multiplicity of <bes fixlet with multiplicity> : integer

## bes domain

BES Domains are collections of sites that constitute a product, such as Patch Management. In the BES Console, domains are represented as the high-level buttons on the left side of the screen. Listing the domains for the Console yields all the currently loaded domains. In Web Reports, only those domains with at least one visible report are listed.

## Version Platforms

### 8.0.584.0Session

#### Creation:

- bes domain : bes domain
- bes domain <string> : bes domain
- current domain : bes domain
- domain of <bes action> : bes domain
- domain of <bes computer group> : bes domain
- domain of <bes filter> : bes domain
- domain of <bes fixlet> : bes domain
- domain of <bes site> : bes domain
- element of <bes domain set> : bes domain

#### Properties:

- action of <bes domain> : bes action
- action set of <bes domain> : bes action set
- computer group of <bes domain> : bes computer group
- computer group set of <bes domain> : bes computer group set
- custom fixlet of <bes domain> : bes fixlet
- custom fixlet set of <bes domain> : bes fixlet set
- custom site of <bes domain> : bes site
- custom site set of <bes domain> : bes site set
- display name of <bes domain> : string
- filter of <bes domain> : bes filter
- filter set of <bes domain> : bes filter set
- id of <bes domain> : string
- link <html> of <bes domain> : html
- link <string> of <bes domain> : html
- link href of <bes domain> : string
- link of <bes domain> : html
- name of <bes domain> : string

- set of <bes domain> : bes domain set
- unique value of <bes domain> : bes domain with multiplicity

Operators:

- <bes domain set> contains <bes domain> : boolean
- <bes domain> = <bes domain> : boolean

## bes domain set

The <bes domain set> inspectors return the current collection of BES Domains as a set, which can be manipulated by intersection, union, and more.

### Version Platforms

8.0.584.0Session

Creation:

- bes domain set : bes domain set
- domain set of <bes site> : bes domain set
- set of <bes domain> : bes domain set

Properties:

- element of <bes domain set> : bes domain
- intersection of <bes domain set> : bes domain set
- size of <bes domain set> : integer
- union of <bes domain set> : bes domain set

Operators:

- <bes domain set> \* <bes domain set> : bes domain set
- <bes domain set> + <bes domain set> : bes domain set
- <bes domain set> - <bes domain set> : bes domain set
- <bes domain set> = <bes domain set> : boolean
- <bes domain set> contains <bes domain set> : boolean

- <bes domain set> contains <bes domain> : boolean

## bes domain with multiplicity

The <bes domain with multiplicity> inspectors deal with sets of BES Domains, allowing you to extract unique domains and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes domain> : bes domain with multiplicity

Properties:

- multiplicity of <bes domain with multiplicity> : integer

## bes action

The <bes action> inspectors are used to access information about the actions which have been issued by the BES Operators. You can iterate over the actions to create lists. Each action may have several properties that can be examined.

### Version Platforms

8.0.584.0Session

Creation:

- action of <bes action result> : bes action
- action of <bes domain> : bes action
- action of <bes site> : bes action
- bes action : bes action
- element of <bes action set> : bes action
- hidden bes action : bes action
- issued action of <bes user> : bes action
- taken action of <bes fixlet> : bes action

- top level bes action : bes action

#### Properties:

- action dependency of <bes action> : bes action
- action script of <bes action> : string
- action script type of <bes action> : string
- applicability relevance of <bes action> : string
- comment of <bes action> : bes comment
- computer group flag of <bes action> : boolean
- constrain by property name of <bes action> : string
- constrain by property relation of <bes action> : string
- constrain by property value of <bes action> : string
- continue on errors flag of <bes action> : boolean
- custom success relevance of <bes action> : string
- database id of <bes action> : integer
- database name of <bes action> : string
- date range end of <bes action> : date
- date range start of <bes action> : date
- day\_of\_week constraint of <bes action> : day of week
- domain of <bes action> : bes domain
- end date of <bes action> : date
- end flag of <bes action> : boolean
- end time\_of\_day of <bes action> : time of day
- expiration flag of <bes action> : boolean
- expiration time of <bes action> : time
- group member flag of <bes action> : boolean
- hidden flag of <bes action> : boolean
- id of <bes action> : integer
- issuer of <bes action> : bes user
- link <html> of <bes action> : html
- link <string> of <bes action> : html
- link href of <bes action> : string

- link of <bes action> : html
- management rights flag of <bes action> : boolean
- member action of <bes action> : bes action
- member action set of <bes action> : bes action set
- message action button flag of <bes action> : boolean
- message allow cancel flag of <bes action> : boolean
- message postpone delay of <bes action> : time interval
- message text of <bes action> : string
- message timeout delay of <bes action> : time interval
- message title of <bes action> : string
- middle action of <bes action> : bes action
- mime field <string> of <bes action> : string
- mime field of <bes action> : mime field
- multiple flag of <bes action> : boolean
- name of <bes action> : string
- offer category of <bes action> : string
- offer description html of <bes action> : html
- offer flag of <bes action> : boolean
- operator site flag of <bes action> : boolean
- parameter <string> of <bes action> : string
- parameter of <bes action> : bes action
- parameter parent group of <bes action> : bes action
- postaction allow cancel flag of <bes action> : boolean
- postaction force delay of <bes action> : time interval
- postaction message text of <bes action> : string
- postaction message title of <bes action> : string
- postaction postpone delay of <bes action> : time interval
- precache flag of <bes action> : boolean
- reapplication interval of <bes action> : time interval
- reapplication limit of <bes action> : integer
- reapply flag of <bes action> : boolean
- reported computer set of <bes action> : bes computer set

- require user absence of <bes action> : boolean
- require user presence of <bes action> : boolean
- restart flag of <bes action> : boolean
- result <( bes action, bes computer )> : bes action result
- result <( bes computer, bes action )> : bes action result
- result from <bes computer> of <bes action> : bes action result
- result of <bes action> : bes action result
- retry delay of <bes action> : time interval
- retry limit of <bes action> : integer
- retry wait for reboot flag of <bes action> : boolean
- running message text of <bes action> : string
- running message title of <bes action> : string
- secure parameter flag of <bes action> : boolean
- selected groups string of <bes action> : string
- set of <bes action> : bes action set
- settings flag of <bes action> : boolean
- show message flag of <bes action> : boolean
- show running message flag of <bes action> : boolean
- shutdown flag of <bes action> : boolean
- single flag of <bes action> : boolean
- source fixlet of <bes action> : bes fixlet
- source relevance of <bes action> : string
- start date of <bes action> : date
- start flag of <bes action> : boolean
- start time\_of\_day of <bes action> : time of day
- state of <bes action> : string
- stopper of <bes action> : bes user
- subscription flag of <bes action> : boolean
- success on custom relevance of <bes action> : boolean
- success on original relevance of <bes action> : boolean
- success on run to completion of <bes action> : boolean
- targeted by id flag of <bes action> : boolean



- targeted by list flag of <bes action> : boolean
- targeted by property flag of <bes action> : boolean
- targeted computer of <bes action> : bes computer
- targeted computer set of <bes action> : bes computer set
- targeted list of <bes action> : string
- targeted name of <bes action> : string
- targeting method of <bes action> : string
- targeting relevance of <bes action> : string
- temporal distribution of <bes action> : time interval
- time issued of <bes action> : time
- time range end of <bes action> : time of day
- time range start of <bes action> : time of day
- time stopped of <bes action> : time
- top level flag of <bes action> : boolean
- unique value of <bes action> : bes action with multiplicity
- untargeted flag of <bes action> : boolean
- urgent flag of <bes action> : boolean
- utc time flag of <bes action> : boolean

#### Casts:

- <bes action> as xml : utf8 string

#### Operators:

- <bes action set> contains <bes action> : boolean
- <bes action> = <bes action> : boolean

### bes action parameter

A Fixlet can incorporate parameters in its associated Action(s). When the Fixlet becomes relevant to the network, the BES Console will prompt the user for the value of the parameter. For example, a Fixlet Action might need to start a Windows service specified by the Console user. When the the Action is taken, the Console would prompt for the name of the service.

That value would then be passed down to the BES Client and substituted into the local Action script upon execution.

### **Version Platforms**

8.0.584.0Session

Creation:

- parameter of <bes action> : bes action parameter

Properties:

- name of <bes action parameter> : string
- value of <bes action parameter> : string

### **bes action result**

The <bes action result> inspectors examine the results of BES Actions, which can be used to make reports.

### **Version Platforms**

8.0.584.0Session

Creation:

- action result of <bes computer> : bes action result
- result <( bes action, bes computer )> : bes action result
- result <( bes computer, bes action )> : bes action result
- result from <bes action> of <bes computer> : bes action result
- result from <bes computer> of <bes action> : bes action result
- result of <bes action> : bes action result

Properties:

- action of <bes action result> : bes action
- apply count of <bes action result> : integer
- computer of <bes action result> : bes computer

- detailed status of <bes action result> : string
- end time of <bes action result> : time
- exit code of <bes action result> : integer
- line number of <bes action result> : integer
- retry count of <bes action result> : integer
- start time of <bes action result> : time
- status of <bes action result> : bes action status

## bes action set

The <bes action set> inspectors return the iterated list of BES Actions, converted into a set to make it easy to do set arithmetic with the list.

### Version Platforms

8.0.584.0Session

Creation:

- action set of <bes domain> : bes action set
- action set of <bes filter> : bes action set
- action set of <bes site> : bes action set
- bes action set : bes action set
- hidden bes action set : bes action set
- issued action set of <bes user> : bes action set
- member action set of <bes action> : bes action set
- reported action set of <bes computer> : bes action set
- set of <bes action> : bes action set
- taken action set of <bes fixlet> : bes action set
- top level bes action set : bes action set

Properties:

- element of <bes action set> : bes action
- intersection of <bes action set> : bes action set
- size of <bes action set> : integer

- union of <bes action set> : bes action set

#### Casts:

- <bes action set> as xml : utf8 string

#### Operators:

- <bes action set> \* <bes action set> : bes action set
- <bes action set> + <bes action set> : bes action set
- <bes action set> - <bes action set> : bes action set
- <bes action set> = <bes action set> : boolean
- <bes action set> contains <bes action set> : boolean
- <bes action set> contains <bes action> : boolean

## bes action status

The <bes action status> inspectors return information about the status of BES Actions, such as whether it is running, evaluating, expired, and more.

### Version Platforms

8.0.584.0Session

#### Creation:

- bes action status constrained : bes action status
- bes action status disk free limited : bes action status
- bes action status disk limited : bes action status
- bes action status download failed : bes action status
- bes action status download size limited : bes action status
- bes action status error : bes action status
- bes action status evaluating : bes action status
- bes action status expired : bes action status
- bes action status failed : bes action status
- bes action status fixed : bes action status

- bes action status hash mismatch : bes action status
- bes action status invalid signature : bes action status
- bes action status irrelevant : bes action status
- bes action status locked : bes action status
- bes action status offers disabled : bes action status
- bes action status pending downloads : bes action status
- bes action status pending login : bes action status
- bes action status pending message : bes action status
- bes action status pending offer : bes action status
- bes action status pending restart : bes action status
- bes action status postponed : bes action status
- bes action status running : bes action status
- bes action status timeout reached : bes action status
- bes action status unreported : bes action status
- bes action status user cancelled : bes action status
- bes action status waiting : bes action status
- status of <bes action result> : bes action status

#### Casts:

- <bes action status> as string : string

#### Operators:

- <bes action status> = <bes action status> : boolean

## bes action with multiplicity

The <bes action with multiplicity> inspectors deal with arrays of BES Actions, allowing you to extract unique actions and count them.

### Version Platforms

8.0.584.0Session

Creation:

- unique value of <bes action> : bes action with multiplicity

Properties:

- multiplicity of <bes action with multiplicity> : integer

## **bes site file**

No documentation exists.

### **Version Platforms**

8.2.1078.0Session

Creation:

- element of <bes site file set> : bes site file
- site file of <bes site> : bes site file

Properties:

- id of <bes site file> : integer
- set of <bes site file> : bes site file
- set unique value of <bes site file> : bes site file with multiplicity

Operators:

- <bes site file set> contains <bes site file> : boolean
- <bes site file> = <bes site file> : boolean

## **bes site file set**

No documentation exists.

### **Version Platforms**

8.2.1078.0Session

**Creation:**

- set of <bes site file> : bes site file set
- site file set of <bes site> : bes site file set

**Properties:**

- element of <bes site file set> : bes site file
- intersection of <bes site file set> : bes site file set
- size of <bes site file set> : integer
- union of <bes site file set> : bes site file set

**Operators:**

- <bes site file set> \* <bes site file set> : bes site file set
- <bes site file set> + <bes site file set> : bes site file set
- <bes site file set> - <bes site file set> : bes site file set
- <bes site file set> = <bes site file set> : boolean
- <bes site file set> contains <bes site file set> : boolean
- <bes site file set> contains <bes site file> : boolean

**bes site file with multiplicity**

No documentation exists.

**Version Platforms**

8.2.1078.0Session

**Creation:**

- unique value of <bes site file> : bes site file with multiplicity

**Properties:**

- multiplicity of <bes site file with multiplicity> : integer

## **bes role**

No documentation exists.

### **Version Platforms**

8.2.1078.0Session

Creation:

- approver role of <bes user> : bes role
- bes role : bes role
- element of <bes role set> : bes role
- role of <bes user> : bes role

Properties:

- can submit queries flag of <bes role> : boolean
- master flag of <bes role> : boolean
- name of <bes role> : string
- set of <bes role> : bes role set
- unique value of <bes role> : bes role with multiplicity
- unmanagedasset privilege scanpoint flag of <bes role> : boolean
- unmanagedasset privilege showall flag of <bes role> : boolean
- unmanagedasset privilege shownone flag of <bes role> : boolean
- user of <bes role> : bes user
- user set of <bes role> : bes user set

Operators:

- <bes role set> contains <bes role> : boolean
- <bes role> = <bes role> : boolean

## **bes role set**

No documentation exists.



**Version Platforms**

8.2.1078.0Session

Creation:

- bes role set : bes role set
- role set of <bes user> : bes role set
- set of <bes role> : bes role set

Properties:

- element of <bes role set> : bes role
- intersection of <bes role set> : bes role set
- size of <bes role set> : integer
- union of <bes role set> : bes role set

Operators:

- <bes role set> \* <bes role set> : bes role set
- <bes role set> + <bes role set> : bes role set
- <bes role set> - <bes role set> : bes role set
- <bes role set> = <bes role set> : boolean
- <bes role set> contains <bes role set> : boolean
- <bes role set> contains <bes role> : boolean

**bes role with multiplicity**

No documentation exists.

**Version Platforms**

8.2.1078.0Session

Creation:

- unique value of <bes role> : bes role with multiplicity

Properties:

- multiplicity of <bes role with multiplicity> : integer

## **bes ldap directory**

No documentation exists.

### **Version Platforms**

8.2.1078.0Session

Creation:

- bes ldap directory : bes ldap directory
- element of <bes ldap directory set> : bes ldap directory
- ldap directory of <bes user> : bes ldap directory

Properties:

- active directory of <bes ldap directory> : boolean
- base distinguished name of <bes ldap directory> : string
- global catalog of <bes ldap directory> : boolean
- group filter of <bes ldap directory> : string
- id of <bes ldap directory> : integer
- login user of <bes ldap directory> : string
- name of <bes ldap directory> : string
- server of <bes ldap directory> : bes ldap directory server
- set of <bes ldap directory> : bes ldap directory set
- uid attribute of <bes ldap directory> : string
- unique value of <bes ldap directory> : bes ldap directory with multiplicity
- use ssl of <bes ldap directory> : boolean
- user filter of <bes ldap directory> : string

Operators:

- <bes ldap directory set> contains <bes ldap directory> : boolean
- <bes ldap directory> = <bes ldap directory> : boolean

## bes ldap directory server

No documentation exists.

### Version Platforms

9.0.586.0Session

Creation:

- server of <bes ldap directory> : bes ldap directory server

Properties:

- host of <bes ldap directory server> : string
- port of <bes ldap directory server> : integer
- priority of <bes ldap directory server> : integer

## bes ldap directory set

No documentation exists.

### Version Platforms

8.2.1078.0Session

Creation:

- bes ldap directory set : bes ldap directory set
- set of <bes ldap directory> : bes ldap directory set

Properties:

- element of <bes ldap directory set> : bes ldap directory
- intersection of <bes ldap directory set> : bes ldap directory set

- size of <bes ldap directory set> : integer
- union of <bes ldap directory set> : bes ldap directory set

Operators:

- <bes ldap directory set> \* <bes ldap directory set> : bes ldap directory set
- <bes ldap directory set> + <bes ldap directory set> : bes ldap directory set
- <bes ldap directory set> - <bes ldap directory set> : bes ldap directory set
- <bes ldap directory set> = <bes ldap directory set> : boolean
- <bes ldap directory set> contains <bes ldap directory set> : boolean
- <bes ldap directory set> contains <bes ldap directory> : boolean

## **bes ldap directory with multiplicity**

No documentation exists.

### **Version Platforms**

8.2.1078.0Session

Creation:

- unique value of <bes ldap directory> : bes ldap directory with multiplicity

Properties:

- multiplicity of <bes ldap directory with multiplicity> : integer

## Statistical

### **exponential projection**

The <exponential projection> inspectors return statistical correlation information about the logarithms of the aggregated properties.

**Version Platforms**

8.0.584.0Mac, Session

Creation:

- exponential fit of <statistical bin> : exponential projection

Properties:

- correlation coefficient of <exponential projection> : floating point
- extrapolation <time> of <exponential projection> : floating point
- rate <time interval> of <exponential projection> : floating point

**linear projection**

The <linear projection> inspectors return statistical correlation information about the linearity of specific aggregated properties.

**Version Platforms**

8.0.584.0Mac, Session

Creation:

- linear fit of <statistical bin> : linear projection

Properties:

- correlation coefficient of <linear projection> : floating point
- extrapolation <time> of <linear projection> : floating point
- rate of <linear projection> : rate

**rate**

Rates are floating point numbers divided by time intervals. These inspectors let you examine and convert rate objects.

## Version Platforms

8.0.584.0Mac, Session

Creation:

- mean sample rate of <statistical bin> : rate
- rate of <linear projection> : rate
- <floating point> / <time interval> : rate

Properties:

- extrema of <rate> : ( rate, rate )
- maximum of <rate> : rate
- minimum of <rate> : rate
- unique value of <rate> : rate with multiplicity

Casts:

- <rate> as string : string

Operators:

- - <rate> : rate
- <floating point> \* <rate> : rate
- <rate> \* <floating point> : rate
- <rate> \* <time interval> : floating point
- <rate> + <rate> : rate
- <rate> - <rate> : rate
- <rate> / <floating point> : rate
- <rate> < <rate> : boolean
- <rate> <= <rate> : boolean
- <rate> = <rate> : boolean
- <time interval> \* <rate> : floating point

## rate with multiplicity

The <rate with multiplicity> inspectors deal with rate arrays, allowing you to extract unique rate values and count them.

### Version Platforms

8.0.584.0Mac, Session

Creation:

- unique value of <rate> : rate with multiplicity

Properties:

- multiplicity of <rate with multiplicity> : integer

## statistic range

Statistical ranges are time intervals used to examine particular statistical bins.

### Version Platforms

8.0.584.0Session

Creation:

- statistic range of <bes property> : statistic range

Properties:

- bin at <time> of <statistic range> : statistical bin
- bin of <statistic range> : statistical bin
- end of <statistic range> : time
- range <time range> of <statistic range> : statistic range
- start of <statistic range> : time
- total <time interval> of <statistic range> : statistical bin
- total of <statistic range> : statistical bin

## statistical bin

Statistical bins contain property information summed over all computers in a given time period.

### Version Platforms

8.0.584.0Session

Creation:

- bin at <time> of <statistic range> : statistical bin
- bin of <statistic range> : statistical bin
- total <time interval> of <statistic range> : statistical bin
- total of <statistic range> : statistical bin

Properties:

- end of <statistical bin> : time
- exponential fit of <statistical bin> : exponential projection
- failure rate of <statistical bin> : floating point
- geometric mean of <statistical bin> : floating point
- javascript array <string> of <statistical bin> : html
- kurtosis of <statistical bin> : floating point
- length of <statistical bin> : time
- interval linear fit of <statistical bin> : linear projection
- logarithm kurtosis of <statistical bin> : floating point
- logarithm skewness of <statistical bin> : floating point
- logarithm standard deviation of <statistical bin> : floating point
- logarithm variance of <statistical bin> : floating point
- maximum single computer total of <statistical bin> : floating point
- maximum value of <statistical bin> : floating point
- mean computer count of <statistical bin> : floating point
- mean failing computer count of <statistical bin> : floating point
- mean logarithm of <statistical bin> : floating point



- mean nonzero value count of <statistical bin> : floating point
- mean of <statistical bin> : floating point
- mean sample interval of <statistical bin> : time interval
- mean sample rate of <statistical bin> : rate
- mean successful computer count of <statistical bin> : floating point
- mean total of <statistical bin> : floating point
- mean value count of <statistical bin> : floating point
- mean zero value count of <statistical bin> : floating point
- minimum single computer total of <statistical bin> : floating point
- minimum value of <statistical bin> : floating point
- skewness of <statistical bin> : floating point
- standard deviation of <statistical bin> : floating point
- start of <statistical bin> : time
- success rate of <statistical bin> : floating point
- total lower bound of <statistical bin> : floating point
- total upper bound of <statistical bin> : floating point
- variance of <statistical bin> : floating point

## System

### operating system

The `operating system` type provides information about the operating system and computer.

#### Version

#### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- operating system : operating system

## Properties:

- android of <operating system> : boolean
- apar <string> of <operating system> : apar
- apar of <operating system> : apar
- architecture of <operating system> : string
- big endian of <operating system> : boolean
- boot time of <operating system> : time
- build number high of <operating system> : integer
- build number low of <operating system> : integer
- build number of <operating system> : integer
- build number of <operating system> : string
- build of <operating system> : string
- codename of <operating system> : string
- csd version of <operating system> : string
- current service pack of <operating system> : service pack
- current technology level of <operating system> : technology level
- embedded of <operating system> : boolean
- hypervisor of <operating system> : string
- ia64 of <operating system> : boolean
- little endian of <operating system> : boolean
- mac of <operating system> : boolean
- machine of <operating system> : string
- major version of <operating system> : integer
- metric <integer> of <operating system> : integer
- minor version of <operating system> : integer
- name of <operating system> : string
- performance counter frequency of <operating system> : hertz
- performance counter of <operating system> : integer
- platform id of <operating system> : integer
- product info numeric of <operating system> : integer
- product info string of <operating system> : string
- product type of <operating system> : operating system product type

- release of <operating system> : string
- release of <operating system> : version
- releaseid of <operating system> : string
- service pack <string> of <operating system> : service pack
- service pack major version of <operating system> : integer
- service pack minor version of <operating system> : integer
- service pack of <operating system> : service pack
- suite mask of <operating system> : operating system suite mask
- technology level <string> of <operating system> : technology level
- technology level of <operating system> : technology level
- unix of <operating system> : boolean
- update level of <operating system> : integer
- uptime of <operating system> : time interval
- uuid of <operating system> : uuid
- version of <operating system> : version
- virtual machine of <operating system> : boolean
- windows of <operating system> : boolean
- x32 of <operating system> : boolean
- x64 of <operating system> : boolean

Casts:

- <operating system> as string : string

## operating system product type

The <operating system product type> inspectors return the product type of the operating system, which includes Workstations, Domain Controllers and Servers.

### Version Platforms

8.0.584.0Windows

Creation:

- nt domain controller product type : operating system product type

- nt server product type : operating system product type
- nt workstation product type : operating system product type
- operating system product type <integer> : operating system product type
- product type of <operating system> : operating system product type

Operators:

- <operating system product type> = <operating system product type> : boolean

## **operating system suite mask**

No documentation exists.

### **Version Platforms**

8.0.584.0Windows

Creation:

- suite mask of <operating system> : operating system suite mask

Properties:

- backoffice bit <operating system suite mask> : boolean
- blade bit <operating system suite mask> : boolean
- communications bit <operating system suite mask> : boolean
- datacenter bit <operating system suite mask> : boolean
- embedded nt bit <operating system suite mask> : boolean
- embedded restricted bit <operating system suite mask> : boolean
- enterprise bit <operating system suite mask> : boolean
- personal bit <operating system suite mask> : boolean
- single user ts bit <operating system suite mask> : boolean
- small business bit <operating system suite mask> : boolean
- small business restricted bit <operating system suite mask> : boolean
- terminal bit <operating system suite mask> : boolean

## service pack

No documentation exists.

### Version Platforms

8.2.1078.0AIX

Creation:

- current service pack of <operating system> : service pack
- service pack <string> of <operating system> : service pack
- service pack of <operating system> : service pack

Properties:

- abstract of <service pack> : string
- extrema of <service pack> : ( service pack, service pack )
- fileset version requirement <string> of <service pack> : fileset version requirement
- fileset version requirement of <service pack> : fileset version requirement
- installed satisfied fileset version requirement of <service pack> : fileset version requirement
- installed unsatisfied fileset version requirement of <service pack> : fileset version requirement
- maximum of <service pack> : service pack
- minimum of <service pack> : service pack
- name of <service pack> : string
- technology level of <service pack> : technology level
- uninstalled fileset version requirement of <service pack> : fileset version requirement
- unique value of <service pack> : service pack with multiplicity

Casts:

- <service pack> as string : string

Operators:

- <service pack> < <service pack> : boolean
- <service pack> < <string> : boolean
- <service pack> <= <service pack> : boolean
- <service pack> <= <string> : boolean
- <service pack> = <service pack> : boolean
- <service pack> = <string> : boolean
- <string> < <service pack> : boolean
- <string> <= <service pack> : boolean
- <string> = <service pack> : boolean

## **service pack with multiplicity**

No documentation exists.

### **Version Platforms**

8.2.1078.0AIX

Creation:

- unique value of <service pack> : service pack with multiplicity

Properties:

- multiplicity of <service pack with multiplicity> : integer

## **technology level**

No documentation exists.

### **Version Platforms**

8.2.1078.0AIX

Creation:

- current technology level of <operating system> : technology level
- technology level <string> of <operating system> : technology level

- technology level of <operating system> : technology level
- technology level of <service pack> : technology level

#### Properties:

- abstract of <technology level> : string
- extrema of <technology level> : ( technology level, technology level )
- fileset version requirement <string> of <technology level> : fileset version requirement
- fileset version requirement of <technology level> : fileset version requirement
- installed satisfied fileset version requirement of <technology level> : fileset version requirement
- installed unsatisfied fileset version requirement of <technology level> : fileset version requirement
- maximum of <technology level> : technology level
- minimum of <technology level> : technology level
- name of <technology level> : string
- uninstalled fileset version requirement of <technology level> : fileset version requirement
- unique value of <technology level> : technology level with multiplicity

#### Casts:

- <technology level> as string : string

#### Operators:

- <string> < <technology level> : boolean
- <string> <= <technology level> : boolean
- <string> = <technology level> : boolean
- <technology level> < <string> : boolean
- <technology level> < <technology level> : boolean
- <technology level> <= <string> : boolean
- <technology level> <= <technology level> : boolean
- <technology level> = <string> : boolean

- <technology level> = <technology level> : boolean

## technology level with multiplicity

No documentation exists.

### Version Platforms

8.2.1078.0AIX

Creation:

- unique value of <technology level> : technology level with multiplicity

Properties:

- multiplicity of <technology level with multiplicity> : integer

## ram

The `ram` object is used to inspect properties of the computer's random access memory.

### Version Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- ram : ram
- random access memory : ram

Properties:

- available amount of <ram> : integer
- buffered amount of <ram> : integer
- cached amount of <ram> : integer
- free amount of <ram> : integer



- shared amount of <ram> : integer
- size of <ram> : integer
- total amount of <ram> : integer
- unavailable amount of <ram> : integer
- used amount of <ram> : integer

## computer

The <computer> inspectors provide access to the name of the computer.

### Version Platforms

8.0.584.0Mac

Creation:

- computer : computer

Properties:

- name of <computer> : string

## language

A language is composed of a primary language (for example, Swiss) and a sub-language (for example, Swiss German).

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- system locale : language
- system ui language : language
- user locale : language
- user ui language : language

**Properties:**

- platform id of <language> : string
- primary codeset of <language> : string
- primary country of <language> : string
- primary language of <language> : primary language

**Casts:**

- <language> as string : string

**primary language**

A primary language identifier indicates the written/spoken language that is used by the system. However, to identify the language that is used in a country or region you must combine the primary language with a sub-language identifier to form language identifiers.

**Version****Platforms**

8.0.584.0 AIX, HP-UX, Red Hat, SUSE, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

**Creation:**

- primary language of <language> : primary language

**Casts:**

- <primary language> as string : string

**bios**

On Windows computers, this object returns strings that identify the version of the BIOS. On other computers, this object does not exist.

**Version****Platforms**

8.0.584.0AIX, HP-UX, Mac, Red Hat, SUSE, Solaris, Windows

8.1.535.0Debian, Ubuntu

Creation:

- bios : bios

Properties:

- date of <bios> : string
- version of <bios> : string
- version string of <bios> : string

Casts:

- <bios> as string : string

**smbios**

The SMBIOS (System Management BIOS) is a database containing information about the system hardware and firmware. It consists of a series of structures that each contain a logical grouping of basic system information such as processor, baseboard, memory, ports, slots, and more. Each structure, in turn, contains specific named values that can be interrogated. For instance, you easily access information about the client processor chip, including the manufacturer, speed and more by accessing the desired value of the 'processor information' structure. These SMBIOS inspectors are based on DMTF Standard version 2.6.1. For a complete listing of the SMBIOS structures and the strings used to query them, refer to the SMBIOS inspectors in the Resources section at the end of this guide.

**Version****Platforms**

8.0.584.0Red Hat, SUSE, Windows

8.1.535.0Debian, Ubuntu

9.5.7.90 Solaris

Creation:

- `smbios` : `smbios`

Properties:

- `structure <string> of <smbios>` : `smbios structure`
- `structure of <smbios>` : `smbios structure`

## **smbios structure**

The SMBIOS (System Management BIOS) is composed of a set of named structures, such as `processor_information`, `bios_information`, and more.

<b>Version</b>	<b>Platforms</b>
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- `structure <string> of <smbios>` : `smbios structure`
- `structure of <smbios value>` : `smbios structure`
- `structure of <smbios>` : `smbios structure`

Properties:

- `hexadecimal <string> of <smbios structure>` : `string`
- `integer <string> of <smbios structure>` : `integer`
- `integer value <string> of <smbios structure>` : `smbios value`
- `length of <smbios structure>` : `integer`
- `name of <smbios structure>` : `string`
- `string <string> of <smbios structure>` : `string`
- `string value <string> of <smbios structure>` : `smbios value`
- `type of <smbios structure>` : `integer`
- `value <string> of <smbios structure>` : `smbios value`

- value of <smbios structure> : smbios value

## smbios value

Information about the SMBIOS (System Management BIOS) is contained in a set of data values stored in collections of individual smbios structures.

Version	Platforms
8.0.584.0	Red Hat, SUSE, Windows
8.1.535.0	Debian, Ubuntu
9.5.7.90	Solaris

Creation:

- integer value <string> of <smbios structure> : smbios value
- string value <string> of <smbios structure> : smbios value
- value <string> of <smbios structure> : smbios value
- value of <smbios structure> : smbios value

Properties:

- hexadecimal of <smbios value> : string
- name of <smbios value> : string
- offset of <smbios value> : integer
- structure of <smbios value> : smbios structure
- type of <smbios value> : string

Casts:

- <smbios value> as hexadecimal : string
- <smbios value> as string : string

## hardware

This inspector holds various identifiers and information about the hardware on which the agent is running.

### Version

### Platforms

9.5.7.90 AIX, Debian, Red Hat, SUSE, Solaris, Ubuntu, Windows

9.5.13.130Raspbian

Creation:

- hardware : hardware

Properties:

- proxied of <hardware> : boolean
- serial of <hardware> : string
- uuid of <hardware> : uuid
- virtual of <hardware> : boolean

## Users

### activity history

The <activity history> inspectors keep track of the activity of a single logged-on user. You may iterate over all logged-on users and get the history for each user separately. User information is purged at log off and power off/client off, even if the user immediately logs back in. These inspectors retrieve information within a tracking window (defaulting to 14 days) or, if the window is still open, the start of that window. Information is in the form of a list of (interval, state) tuples. The first element of the list is the current state of the system. The event lists are fetched from the client each time 'activity history' is referenced, so you should avoid referencing these inspectors more than once in a relevance statement. Note:

Activity tracking only works while the Client UI is running. These inspectors only work with Windows 2000 or better.

### **Version Platforms**

8.0.584.0Windows

Creation:

- activity history of <logged on user> : activity history

Properties:

- user interval <activity history> : system power interval
- user interval of <activity history> : system power interval

## **local group**

The <local group> inspectors return information on local groups as defined on the local BES Client computer using the windows NetLocalGroupEnum API, one of Windows Network Management Functions. Local groups have names, comments, members and security IDs.

### **Version Platforms**

8.0.584.0Windows

Creation:

- local group : local group
- local group <string> : local group

Properties:

- comment of <local group> : string
- member of <local group> : local group member
- name of <local group> : string

## local group member

The <local group member> inspectors return information (such as security IDs) on members of local groups as defined on the local BES Client computer using the windows NetLocalGroupEnum API, one of Windows Network Management Functions.

### Version Platforms

8.0.584.0Windows

Creation:

- member of <local group> : local group member

Casts:

- <local group member> as string : string

## local user

The <local user> type represents users under Windows systems. This type has been deprecated by <user> type since version 8.1.535.0.

**Deprecated:** This type was removed in version 8.1.535.0.

### Version Platforms

8.0.584.0Windows

Creation:

- domain user : local user
- domain user <string> : local user
- local user : local user
- local user <string> : local user

Properties:

- account disabled flag of <local user> : boolean



- account expiration of <local user> : time
- accounts operator flag of <local user> : boolean
- admin privilege of <local user> : boolean
- allowed workstations string of <local user> : string
- application parameter string of <local user> : string
- bad password count of <local user> : integer
- code page of <local user> : integer
- comment of <local user> : string
- communications operator flag of <local user> : boolean
- country code of <local user> : integer
- full name of <local user> : string
- guest privilege of <local user> : boolean
- home directory drive of <local user> : string
- home directory of <local user> : string
- home directory required flag of <local user> : boolean
- interdomain trust account flag of <local user> : boolean
- last logoff of <local user> : time last logon of <local user> : time
- locked out flag of <local user> : boolean
- logon count of <local user> : integer
- logon script of <local user> : string
- logon server of <local user> : string
- maximum storage of <local user> : integer
- name of <local user> : string
- no password required flag of <local user> : boolean
- normal account flag of <local user> : boolean
- password age of <local user> : time interval
- password change disabled flag of <local user> : boolean
- password expiration disabled flag of <local user> : boolean
- password expired of <local user> : boolean
- primary group id of <local user> : integer
- print operator flag of <local user> : boolean
- profile folder of <local user> : string

- script flag of <local user> : boolean
- server operator flag of <local user> : boolean
- server trust account flag of <local user> : boolean
- temporary duplicate account flag of <local user> : boolean
- user comment of <local user> : string
- user id of <local user> : integer
- user privilege of <local user> : boolean
- workstation trust account flag of <local user> : boolean

## logged on user

These Windows and Macintosh inspectors return information about the currently logged-on user. With the advent of Terminal Services and Fast User Switching, these inspectors are designed to iterate over all logged on users. Windows Note: If Terminal Services are available (NT/2000/2003/XP/Vista) and enabled, these inspectors iterate over the active and disconnected sessions as returned by WTSEnumerateSessions. Disconnected sessions are those where a user logs on, but is currently inactive. On Vista, the non-interactive session 0 (used for services isolation) is not included. If Terminal Services aren't available, the ACLs on the security descriptor of the "winsta0" window station are examined for user logons. On Windows 9x systems, these inspectors return the user session associated with the registry value "Current User" of "SYSTEM\CurrentControlSet\Control" if it exists. Otherwise, if a shell process process such as Explorer.exe is running, they return a single session associated with an unnamed user (which occurs when the user cancels the 9x login dialog).

### Version

### Platforms

8.0.584.0 Mac, Windows

8.2.1078.0 AIX, Debian, HP-UX, Red Hat, SUSE, Solaris, Ubuntu

9.5.13.130 Raspbian

Creation:

- current user : logged on user
- logged on user : logged on user

- logged on user of <user> : logged on user

#### Properties:

- active of <logged on user> : boolean
- activity history of <logged on user> : activity history
- name of <logged on user> : string
- process id of <logged on user> : integer
- remote of <logged on user> : boolean
- session id of <logged on user> : integer
- session id of <logged on user> : string
- sid of <logged on user> : security identifier
- tty of <logged on user> : string
- user key of <logged on user> : registry key
- user of <logged on user> : user

#### user

- On Windows, returns objects for all users of the computer, logged-in or not.
- On Linux, returns logged-in users only. If a user is logged in from multiple terminals, the object appears multiple times in the returned results.

#### Version

#### Platforms

8.0.584.0AIX, HP-UX, Mac, Red Hat, SUSE, Solaris

8.1.535.0Debian, Ubuntu, Windows

#### Creation:

- current user : user
- domain user : user
- domain user <string> : user
- domain user of <active directory local user> : user
- effective user of <process> : user
- local user : user

- local user <string> : user
- user : user user <string> : user
- user of <logged on user> : user
- user of <process> : user
- user of <security identifier> : user

Properties:

- account disabled flag of <user> : boolean
- account expiration of <user> : time
- accounts operator flag of <user> : boolean
- active directory user of <user> : active directory local user
- admin privilege of <user> : boolean
- allowed workstations string of <user> : string
- application parameter string of <user> : string
- attribute <string> of <user> : user attribute
- attribute of <user> : user attribute
- bad password count of <user> : integer
- code page of <user> : integer
- comment of <user> : string
- communications operator flag of <user> : boolean
- country code of <user> : integer
- domain of <user> : string
- full name of <user> : string
- guest privilege of <user> : boolean
- home directory drive of <user> : string
- home directory folder of <user> : folder
- home directory of <user> : folder
- home directory of <user> : string
- home directory required flag of <user> : boolean
- id of <user> : integer id of <user> : string
- interdomain trust account flag of <user> : boolean
- last logoff of <user> : time

- last logon of <user> : time
- locked out flag of <user> : boolean
- logged on user of <user> : logged on user
- logon count of <user> : integer
- logon script of <user> : string
- logon server of <user> : string
- maximum storage of <user> : integer
- name of <user> : string
- no password required flag of <user> : boolean
- normal account flag of <user> : boolean
- password age of <user> : time interval
- password change disabled flag of <user> : boolean
- password expiration disabled flag of <user> : boolean
- password expired of <user> : boolean
- primary group id of <user> : integer
- primary group id of <user> : string
- print operator flag of <user> : boolean
- profile folder of <user> : string
- script flag of <user> : boolean
- server operator flag of <user> : boolean
- server trust account flag of <user> : boolean
- sid of <user> : security identifier
- temporary duplicate account flag of <user> : boolean
- tty of <user> : string
- user comment of <user> : string
- user id of <user> : integer
- user id of <user> : string
- user privilege of <user> : boolean
- winrt package of <user> : winrt package
- workstation trust account flag of <user> : boolean

## user attribute

These Macintosh inspectors provide information, such as user ID and home directory, about the specified user.

### Version Platforms

8.0.584.0Mac

Creation:

- attribute <string> of <user> : user attribute
- attribute of <user> : user attribute

Properties:

- key of <user attribute> : string
- value of <user attribute> : string

Casts:

- <user attribute> as string : string

## Versions

### strverscmp version

Uses the OS supplied strverscmp function, which may be useful for certain older-style version comparisons. For more information, see the man page for strverscmp.

### Version Platforms

8.0.584.0 Red Hat, SUSE

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- `strverscmp version <string>` : `strverscmp version`
- `<string> as strverscmp version` : `strverscmp version`

Operators:

- `<string> < <strverscmp version>` : `boolean`
- `<string> <= <strverscmp version>` : `boolean`
- `<string> = <strverscmp version>` : `boolean`
- `<strverscmp version> < <string>` : `boolean`
- `<strverscmp version> < <strverscmp version>` : `boolean`
- `<strverscmp version> <= <string>` : `boolean`
- `<strverscmp version> <= <strverscmp version>` : `boolean`
- `<strverscmp version> = <string>` : `boolean`
- `<strverscmp version> = <strverscmp version>` : `boolean`

## version

This is the numeric method of indicating the file version, which is compact, convenient and fast. It makes use of a short string to define the version number. Version types are available as both client and core inspectors, so if you don't find what you want in one guide, please check the other.

The following file version string formats are supported:

- Windows: "Major.Minor.Patch.Build". For example "1.2.3.4".
- MacOS: "Major.Minor.BugStageBuild". For example "1.2.3a4".

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- bundle version of <bundle> : version
- bundle version of <filesystem object> : version
- bundle version of <folder> : version
- file version of <file> : version
- name registry version : version
- product version of <file> : version
- quickdraw version : version
- raw file version of <file> : version
- raw product version of <file> : version
- raw version of <file> : version
- release of <operating system> : version
- rom version : version sqlite version : version
- system version : version
- version <integer> of <file> : version
- version <string> : version
- version of <application usage summary instance> : version
- version of <bundle> : version
- version of <client> : version
- version of <component> : version
- version of <current relay> : version
- version of <file> : version
- version of <fileset> : version
- version of <filesystem object> : version
- version of <folder> : version
- version of <module> : version
- version of <operating system> : version
- version of <package> : version
- version of <registration server> : version
- version of <scsibus> : version
- version of <service> : version
- version of <usb> : version
- version of <winrt package id> : version



- <string> as version : version

#### Properties:

- bug revision of <version> : integer
- build revision of <version> : integer
- extrema of <version> : ( version, version )
- major revision of <version> : integer
- maximum of <version> : version
- minimum of <version> : version
- minor revision of <version> : integer
- pad of <version> : version
- patch revision of <version> : integer
- stage of <version> : stage
- unique value of <version> : version with multiplicity

#### Casts:

- <version> as string : string
- <version> as version : version

#### Operators:

- <string> < <version> : boolean
- <string> <= <version> : boolean
- <string> = <version> : boolean
- <version> < <string> : boolean
- <version> < <version> : boolean
- <version> <= <string> : boolean
- <version> <= <version> : boolean
- <version> = <string> : boolean
- <version> = <version> : boolean

## version with multiplicity

The <version with multiplicity> inspectors deal with version arrays, allowing you to extract unique version values and count them.

### Version

### Platforms

8.0.584.0 AIX, HP-UX, Mac, Red Hat, SUSE, Session, Solaris, Windows

8.1.535.0 Debian, Ubuntu

9.5.13.130Raspbian

Creation:

- unique value of <version> : version with multiplicity

Properties:

- multiplicity of <version with multiplicity> : integer

## Windows

### active device

On Windows NT systems (including XP and 2K), the <active device> inspectors returns a set of objects corresponding to the active devices on the machine, for example: modems, graphics cards, printers, and more.

### Version Platforms

8.0.584.0Windows

Creation:

- active device : active device

Properties:

- class of <active device> : string
- description of <active device> : string
- driver key of <active device> : registry key
- driver key value name of <active device> : string
- friendly name of <active device> : string
- hardware id of <active device> : string
- location information of <active device> : string
- manufacturer of <active device> : string
- problem id of <active device> : integer
- service key value name of <active device> : string
- status of <active device> : integer

## access control entry

An Access Control Entity, or ACE, is an entry in an access control list (ACL). An ACE contains a set of access rights and a security identifier (SID) that identifies a trustee for whom the rights are allowed, denied, or audited.

### Version Platforms

8.0.584.0Windows

Creation:

- entry of <access control list> : access control entry

Properties:

- access mode of <access control entry> : integer
- access system security permission of <access control entry> : boolean
- ace flag of <access control entry> : integer
- ace type of <access control entry> : integer
- append permission of <access control entry> : boolean
- audit failure of <access control entry> : boolean
- audit success of <access control entry> : boolean

- change notification permission of <access control entry> : boolean
- container inherit of <access control entry> : boolean
- create file permission of <access control entry> : boolean
- create folder permission of <access control entry> : boolean
- create link permission of <access control entry> : boolean
- create subkey permission of <access control entry> : boolean
- delete child permission of <access control entry> : boolean
- delete permission of <access control entry> : boolean
- deny type of <access control entry> : boolean
- enumerate subkeys permission of <access control entry> : boolean
- execute permission of <access control entry> : boolean
- generic all permission of <access control entry> : boolean
- generic execute permission of <access control entry> : boolean
- generic read permission of <access control entry> : boolean
- generic write permission of <access control entry> : boolean
- grant type of <access control entry> : boolean
- inherit only of <access control entry> : boolean
- inheritance of <access control entry> : integer
- inherited of <access control entry> : boolean
- list permission of <access control entry> : boolean
- maximum allowed permission of <access control entry> : boolean
- no propagate inherit of <access control entry> : boolean
- object inherit of <access control entry> : boolean
- query value permission of <access control entry> : boolean
- read attributes permission of <access control entry> : boolean
- read control permission of <access control entry> : boolean
- read extended attributes permission of <access control entry> : boolean
- read permission of <access control entry> : boolean
- set value permission of <access control entry> : boolean
- synchronize permission of <access control entry> : boolean
- traverse permission of <access control entry> : boolean
- trustee of <access control entry> : security identifier

- trustee type of <access control entry> : integer
- write attributes permission of <access control entry> : boolean
- write dac permission of <access control entry> : boolean
- write extended attributes permission of <access control entry> : boolean
- write owner permission of <access control entry> : boolean
- write permission of <access control entry> : boolean

## access control list

An Access Control List, or ACL, is a list of security protections that applies to an object. An object can be a file, process, event, or anything else having a security descriptor. An entry in an access control list (ACL) is an access control entry (ACE). These inspectors work by exposing the GetEffectiveRightsFromAcl method, as explained at the MSDN site. Note: Requires Windows XP, Windows 2000 Professional, or Windows NT Workstation 3.1 and later.

### Version Platforms

8.0.584.0Windows

Properties:

- effective access mode for <security account> of <access control list> : integer
- effective access mode for <string> of <access control list> : integer
- effective access system security permission for <security account> of <access control list> : boolean
- effective access system security permission for <string> of <access control list> : boolean
- effective append permission for <security account> of <access control list> : boolean
- effective append permission for <string> of <access control list> : boolean
- effective change notification permission for <security account> of <access control list> : boolean
- effective change notification permission for <string> of <access control list> : boolean
- effective create file permission for <security account> of <access control list> : boolean
- effective create file permission for <string> of <access control list> : boolean

- effective create folder permission for <security account> of <access control list> : boolean
- effective create folder permission for <string> of <access control list> : boolean
- effective create link permission for <security account> of <access control list> : boolean
- effective create link permission for <string> of <access control list> : boolean
- effective create subkey permission for <security account> of <access control list> : boolean
- effective create subkey permission for <string> of <access control list> : boolean
- effective delete child permission for <security account> of <access control list> : boolean
- effective delete child permission for <string> of <access control list> : boolean
- effective delete permission for <security account> of <access control list> : boolean
- effective delete permission for <string> of <access control list> : boolean
- effective enumerate subkeys permission for <security account> of <access control list> : boolean
- effective enumerate subkeys permission for <string> of <access control list> : boolean
- effective execute permission for <security account> of <access control list> : boolean
- effective execute permission for <string> of <access control list> : boolean
- effective generic all permission for <security account> of <access control list> : boolean
- effective generic all permission for <string> of <access control list> : boolean
- effective generic execute permission for <security account> of <access control list> : boolean
- effective generic execute permission for <string> of <access control list> : boolean
- effective generic read permission for <security account> of <access control list> : boolean
- effective generic read permission for <string> of <access control list> : boolean
- effective generic write permission for <security account> of <access control list> : boolean
- effective generic write permission for <string> of <access control list> : boolean
- effective list permission for <security account> of <access control list> : boolean

- effective list permission for <string> of <access control list> : boolean
- effective maximum allowed permission for <security account> of <access control list> : boolean
- effective maximum allowed permission for <string> of <access control list> : boolean
- effective query value permission for <security account> of <access control list> : boolean
- effective query value permission for <string> of <access control list> : boolean
- effective read attributes permission for <security account> of <access control list> : boolean
- effective read attributes permission for <string> of <access control list> : boolean
- effective read control permission for <security account> of <access control list> : boolean
- effective read control permission for <string> of <access control list> : boolean
- effective read extended attributes permission for <security account> of <access control list> : boolean
- effective read extended attributes permission for <string> of <access control list> : boolean
- effective read permission for <security account> of <access control list> : boolean
- effective read permission for <string> of <access control list> : boolean
- effective set value permission for <security account> of <access control list> : boolean
- effective set value permission for <string> of <access control list> : boolean
- effective synchronize permission for <security account> of <access control list> : boolean
- effective synchronize permission for <string> of <access control list> : boolean
- effective traverse permission for <security account> of <access control list> : boolean
- effective traverse permission for <string> of <access control list> : boolean
- effective write attributes permission for <security account> of <access control list> : boolean
- effective write attributes permission for <string> of <access control list> : boolean
- effective write dac permission for <security account> of <access control list> : boolean
- effective write dac permission for <string> of <access control list> : boolean

- effective write extended attributes permission for <security account> of <access control list> : boolean
- effective write extended attributes permission for <string> of <access control list> : boolean
- effective write owner permission for <security account> of <access control list> : boolean
- effective write owner permission for <string> of <access control list> : boolean
- effective write permission for <security account> of <access control list> : boolean
- effective write permission for <string> of <access control list> : boolean
- entry of <access control list> : access control entry

## discretionary access control list

The <discretionary access control list> inspectors retrieve information from the access control list that is monitored by the owner of the object and specifies what kinds of access particular users or groups can have to the specified object.

### Version Platforms

8.0.584.0Windows

Creation:

- dacl of <security descriptor> : discretionary access control list

Casts:

- <discretionary access control list> as string : string

## security account

The <security account> type serves as a base type for the "user" and "local group" types and for properties common to users and groups.

### Version Platforms

8.0.584.0Windows



## Creation:

- account with privilege <string> : security account
- account with privileges : security account
- anonymous logon group : security account
- authenticated users group : security account
- batch group : security account
- builtin administrators group : security account
- builtin backup operators group : security account
- builtin guests group : security account
- builtin network configuration operators group : security account
- builtin power users group : security account
- builtin remote desktop users group : security account
- builtin replicator group : security account
- builtin users group : security account
- creator group group : security account
- creator owner group : security account
- dialup group : security account everyone group : security account
- interactive group : security account
- local service group : security account
- network group : security account
- network service group : security account
- remote interactive logon group : security account
- security account <string> : security account
- service group : security account
- system group : security account
- terminal server user group : security account
- well known account <integer> : security account

## Properties:

- privilege of <security account> : string
- sid of <security account> : security identifier

## security database

The <security database> inspectors retrieve information from the security accounts manager (SAM) database or, in the case of domain controllers, the Active Directory. The Security database and its properties expose the NetUserModalsGet API, levels 0 and 3. For more information, see the NetUserModalsGet Function at the MSDN site: <http://msdn.microsoft.com>.

### Version Platforms

8.0.584.0Windows

Creation:

- security database : security database

Properties:

- account lockout duration of <security database> : time interval
- account lockout observation window of <security database> : time interval
- account lockout threshold of <security database> : integer
- force logoff interval of <security database> : time interval
- maximum password age of <security database> : time interval
- minimum password age of <security database> : time interval
- minimum password length of <security database> : integer
- password history length of <security database> : integer

## security descriptor

The <security descriptor> objects are structures and associated data that contain the security information for a securable object. A security descriptor identifies the object's owner and primary group. It can also contain a DACL that controls access to the object, and a SACL that controls the logging of attempts to access the object.

### Version Platforms

8.0.584.0Windows

**Creation:**

- security descriptor <string> : security descriptor
- security descriptor of <file> : security descriptor
- security descriptor of <folder> : security descriptor
- security descriptor of <network share> : security descriptor
- security descriptor of <registry key> : security descriptor
- security descriptor of <scheduled task> : security descriptor
- security descriptor of <service> : security descriptor
- security descriptor of <task folder> : security descriptor
- security descriptor of <task registration info> : security descriptor

**Properties:**

- control of <security descriptor> : integer
- dacl of <security descriptor> : discretionary access control list
- group of <security descriptor> : security identifier
- null dacl of <security descriptor> : boolean
- null sacl of <security descriptor> : boolean
- owner of <security descriptor> : security identifier
- sacl of <security descriptor> : system access control list

**Casts:**

- <security descriptor> as string : string

**security identifier**

A Security Identifier, or SID, is a data structure that identifies user, group, and computer accounts. Every account on a network is issued a unique SID when the account is first created. Internal processes in Windows refer to an account's SID rather than the account's user or group name.

## Version Platforms

8.0.584.0Windows

8.1.535.0Mac

Creation:

- group of <security descriptor> : security identifier
- owner of <security descriptor> : security identifier
- sid <string> : security identifier
- sid of <active directory group> : security identifier
- sid of <logged on user> : security identifier
- sid of <security account> : security identifier
- sid of <user> : security identifier
- sid of <winrt package user information> : security identifier
- trustee of <access control entry> : security identifier
- user of <process> : security identifier
- user sid of <event log record> : security identifier

Properties:

- account name of <security identifier> : string
- component string of <security identifier> : string
- domain name of <security identifier> : string
- rsop user wmi <security identifier> : wmi
- user of <security identifier> : user

Casts:

- <security identifier> as string : string

Operators:

- <security identifier> = <security identifier> : boolean

## system access control list

The <system access control list> inspectors retrieve information from the access control list that controls the generation of audit messages for attempts to access a securable object. The ability to get or set an object's SACL is controlled by a privilege typically held only by system administrators.

### Version Platforms

8.0.584.0Windows

Creation:

- sacl of <security descriptor> : system access control list

Casts:

- <system access control list> as string : string

## boot task trigger

The <boot task trigger> inspectors deal with tasks that are triggered when the system is booted up. More information about this subset of task triggers can be found by searching for Boot Trigger at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task trigger> as boot task trigger : boot task trigger

Properties:

- delay of <boot task trigger> : time interval

## com handler task action

The <com handler task action> inspectors deal with Windows COM Handler Actions, which are specified by tasks triggered by various events like computer state changes or scheduled times. The COM Handler Action causes a handler to be fired. For more information, see COM Handler Action at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task action> as com handler task action : com handler task action

Properties:

- class id of <com handler task action> : string
- data of <com handler task action> : string

## daily task trigger

The <daily task trigger> inspectors deal with tasks that are triggered on a daily basis. For example, a task might start at 9:00 AM every day or every other day. More information about this subset of task triggers can be found by searching for Daily Trigger at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task trigger> as daily task trigger : daily task trigger

Properties:

- days interval of <daily task trigger> : time interval
- random delay of <daily task trigger> : time interval

## email task action

The <email task action> inspectors deal with Windows Email Actions, which are specified by tasks triggered by various events like computer state changes or scheduled times. The Email Action causes an email to be sent. For more information, see Email Action at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task action> as email task action : email task action

Properties:

- attachment of <email task action> : string
- bcc of <email task action> : string
- body of <email task action> : string
- cc of <email task action> : string
- from of <email task action> : string
- header field of <email task action> : task named value pair
- replyto of <email task action> : string
- server of <email task action> : string
- subject of <email task action> : string
- to of <email task action> : string

## event task trigger

The <event task trigger> inspectors deal with tasks that are triggered by a specific event, such as a system start, logon or idle. More information about event task triggers can be found by searching for Task Triggers at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task trigger> as event task trigger : event task trigger

Properties:

- delay of <event task trigger> : time interval
- subscription of <event task trigger> : string
- value query of <event task trigger> : task named value pair

## **exec task action**

The <exec task action> inspectors deal with Windows Exec Actions, which are specified by tasks triggered by various events like computer state changes or scheduled times. The Exec Action causes a program to run. For more information, see Exec Action at the MSDN site.

### **Version Platforms**

8.0.584.0Windows

Creation:

- <task action> as exec task action : exec task action

Properties:

- argument string of <exec task action> : string
- path of <exec task action> : string
- working directory of <exec task action> : string

## **idle task trigger**

No documentation exists.

### **Version Platforms**

8.0.584.0Windows

Creation:



- <task trigger> as idle task trigger : idle task trigger

## logon task trigger

The <logon task trigger> inspectors deal with tasks that are triggered when a user logs on to the computer. More information about this subset of task triggers can be found by searching for Logon Trigger at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task trigger> as logon task trigger : logon task trigger

Properties:

- delay of <logon task trigger> : time interval
- user id of <logon task trigger> : string

## monthly task trigger

The <monthly task trigger> inspectors deal with tasks that are triggered on a monthly basis. For example, a task might start at 9:00 AM on specific days of specific months. More information about this subset of task triggers can be found by searching for Monthly Trigger at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task trigger> as monthly task trigger : monthly task trigger

Properties:

- days run of <monthly task trigger> : day of month
- months run of <monthly task trigger> : month
- random delay of <monthly task trigger> : time interval
- run on last day in month of <monthly task trigger> : boolean

## monthlydow task trigger

The <monthlydow task trigger> inspectors deal with tasks that are triggered on a repeating day-of-the-week basis. For example, the task might start at 9:00 AM on specific days of the week, weeks of the month, or months of the year. More information about this subset of task triggers can be found by searching for MonthlyDOW Trigger at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task trigger> as monthlydow task trigger : monthlydow task trigger

Properties:

- days run of <monthlydow task trigger> : day of week
- months run of <monthlydow task trigger> : month
- random delay of <monthlydow task trigger> : time interval
- run on fifth week in month of <monthlydow task trigger> : boolean
- run on first week in month of <monthlydow task trigger> : boolean
- run on fourth week in month of <monthlydow task trigger> : boolean
- run on last week in month of <monthlydow task trigger> : boolean
- run on second week in month of <monthlydow task trigger> : boolean
- run on third week in month of <monthlydow task trigger> : boolean

## registration task trigger

The <registration task trigger> inspectors deal with tasks that are triggered whenever the task is registered or updated. More information about this subset of task triggers can be found by searching for Registration triggers at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task trigger> as registration task trigger : registration task trigger

Properties:

- delay of <registration task trigger> : time interval

## running task

This group of inspectors is built on top of the Windows Task Scheduler (see the MSDN reference). They only work with the 2.0 interface (Win 7, Vista and Server 2008). The scheduler allows tasks to be run according to various criteria. These inspectors provide information such as the name and action(s) of each running task. These inspectors are for the 2.0 interface only.

### Version Platforms

8.0.584.0Windows

Creation:

- running task : running task

Properties:

- current action of <running task> : string
- disabled state of <running task> : boolean
- engine pid of <running task> : integer

- instance guid of <running task> : string
- name of <running task> : string
- path of <running task> : string
- queued state of <running task> : boolean
- ready state of <running task> : boolean
- running state of <running task> : boolean
- unknown state of <running task> : boolean

## **scheduled task**

The <scheduled task> inspectors are built on top of the Windows Task Scheduler (see the MSDN reference). There are two versions: the 1.0 interface (Win 2000, XP & Server 2003) and the 2.0 interface (Win 7, Vista and Server 2008) which is favored when available. The Task Scheduler inspector set reflects the 2.0 interface layout which in turn maps back to the 1.0 interface. Features of the 1.0 interface are available in the 2.0 interface, but not vice-versa. If the 2.0 interface isn't available, you may encounter undefined objects. Each of these inspectors works with both 1.0 and 2.0 unless explicitly Noted.

### **Version Platforms**

8.0.584.0Windows

Creation:

- descendant of <task folder> : scheduled task
- first interface scheduled task : scheduled task
- scheduled task : scheduled task
- scheduled task <string> : scheduled task
- scheduled task <string> of <task folder> : scheduled task
- scheduled task of <task folder> : scheduled task

Properties:

- definition of <scheduled task> : task definition
- disabled state of <scheduled task> : boolean
- enabled of <scheduled task> : boolean

- last run time of <scheduled task> : time
- last task result of <scheduled task> : integer
- missed run count of <scheduled task> : integer
- name of <scheduled task> : string
- next run time of <scheduled task> : time
- path of <scheduled task> : string
- queued state of <scheduled task> : boolean
- ready state of <scheduled task> : boolean
- running state of <scheduled task> : boolean
- security descriptor of <scheduled task> : security descriptor
- trigger string of <scheduled task> : string
- unknown state of <scheduled task> : boolean
- xml of <scheduled task> : string

### session state change task trigger

The <session state change task trigger> inspectors return information about Windows actions that are triggered by changes in Terminal Server session states, such as switching users or logging in remotely.

	<b>Version</b>	<b>Platforms</b>
8.0.584.0		Windows
Creation:		

- <task trigger> as session state change task trigger : session state change task trigger

Properties:

- console connect of <session state change task trigger> : boolean
- console disconnect of <session state change task trigger> : boolean
- delay of <session state change task trigger> : time interval
- remote connect of <session state change task trigger> : boolean
- remote disconnect of <session state change task trigger> : boolean
- session lock of <session state change task trigger> : boolean

- session unlock of <session state change task trigger> : boolean
- user id of <session state change task trigger> : string

## show message task action

The <show message task action> inspectors deal with Windows Show Message Actions, which are specified by tasks triggered by various events like computer state changes or scheduled times. The Show Message Action causes a a message box to be displayed. For more information, see Show Message Action at the MSDN site.

### Version Platforms

8.0.584.0Windows

Creation:

- <task action> as show message task action : show message task action

Properties:

- message body of <show message task action> : string
- title of <show message task action> : string

## task action

The <task action> inspectors grant access to the set of scheduled task actions. Actions have an ID and a type. The action types include starting COM handles, executing programs, sending emails and displaying messages.

### Version Platforms

8.0.584.0Windows

Creation:

- action of <task definition> : task action

Properties:

- id of <task action> : string
- type of <task action> : task action type

#### Casts:

- <task action> as com handler task action : com handler task action
- <task action> as email task action : email task action
- <task action> as exec task action : exec task action
- <task action> as show message task action : show message task action

## task action type

The <task action type> inspectors return the Action Type(s) for a Windows Task. Action Types include Executables, Email messages, Handlers and Messages. For more information, see Task Actions at the MSDN site.

### Version Platforms

8.0.584.0Windows

#### Creation:

- com handler task action type : task action type
- email task action type : task action type
- exec task action type : task action type
- show message task action type : task action type
- task action type <integer> : task action type
- type of <task action> : task action type

#### Operators:

- <task action type> = <task action type> : boolean

## task definition

The <task definition> inspectors give access to the components of a task, such as the settings, triggers, actions and registration information.

### Version Platforms

8.0.584.0Windows

Creation:

- definition of <scheduled task> : task definition

Properties:

- action of <task definition> : task action
- data of <task definition> : string
- principal of <task definition> : task principal
- registration info of <task definition> : task registration info
- setting of <task definition> : task settings
- trigger of <task definition> : task trigger
- xml of <task definition> : string

## task folder

The <task folder> objects provide the methods that are used to retrieve tasks from the folder, as well as from its subfolders. Task folders are specified by name, path and include scheduled tasks.

### Version Platforms

8.0.584.0Windows

Creation:

- task folder <string> : task folder

Properties:



- descendant of <task folder> : scheduled task
- name of <task folder> : string
- path of <task folder> : string
- scheduled task <string> of <task folder> : scheduled task
- scheduled task of <task folder> : scheduled task
- security descriptor of <task folder> : security descriptor
- task folder of <task folder> : task folder

## task idle settings

The <task idle settings> objects specify how the Task Scheduler performs tasks when the computer is in an idle condition. These settings concern the duration, restart, stop and wait conditions for the specified idle settings. For more information about idle conditions, see 'Task Idle Conditions' at MSDN.

### Version Platforms

8.0.584.0Windows

Creation:

- idle setting of <task settings> : task idle settings

Properties:

- idle duration of <task idle settings> : time interval
- restart on idle of <task idle settings> : boolean
- stop on idle end of <task idle settings> : boolean
- wait timeout of <task idle settings> : time interval

## task named value pair

The <task named value pair> inspectors return name-value pairs associated with various aspects of a scheduled task.

## Version Platforms

8.0.584.0Windows

Creation:

- header field of <email task action> : task named value pair
- value query of <event task trigger> : task named value pair

Properties:

- name of <task named value pair> : string
- value of <task named value pair> : string

## task network settings

The <task network settings> inspectors provide the settings used by the Task Scheduler to obtain a network profile. A network settings object has an ID and a name.

## Version Platforms

8.0.584.0Windows

Creation:

- network setting of <task settings> : task network settings

Properties:

- id of <task network settings> : string
- name of <task network settings> : string

## task principal

The <task principal> inspectors provide information about the scheduled task principal, which encapsulates the security credentials. The principal object includes a display name, a logon type, a run level and a set of IDs.

**Version Platforms**

8.0.584.0Windows

Creation:

- principal of <task definition> : task principal

Properties:

- display name of <task principal> : string
- group id of <task principal> : string
- group logon of <task principal> : boolean
- highest runlevel of <task principal> : boolean
- id of <task principal> : string
- interactive token logon of <task principal> : boolean
- interactive token password logon of <task principal> : boolean
- lua runlevel of <task principal> : boolean
- none logon of <task principal> : boolean
- password logon of <task principal> : boolean
- s4u logon of <task principal> : boolean
- service account logon of <task principal> : boolean
- user id of <task principal> : string

**task registration info**

The <task registration info> objects provide the administrative information used to describe a scheduled task. This information includes details such as a description, the name of the author, the date the task was registered, and the security descriptor.

**Version Platforms**

8.0.584.0Windows

Creation:

- registration info of <task definition> : task registration info

## Properties:

- author of <task registration info> : string
- date of <task registration info> : time
- description of <task registration info> : string
- documentation of <task registration info> : string
- security descriptor of <task registration info> : security descriptor
- source of <task registration info> : string
- uri of <task registration info> : string
- version of <task registration info> : string
- xml of <task registration info> : string

## task repetition pattern

The <task repetition pattern> inspectors define how often a scheduled task should be run and determine how long the repetition pattern will be repeated after the task is initiated.

### Version Platforms

8.0.584.0Windows

Creation:

- repetition of <task trigger> : task repetition pattern

## Properties:

- duration of <task repetition pattern> : time interval
- interval of <task repetition pattern> : time interval
- stop at duration end of <task repetition pattern> : boolean

## task settings

The <task settings> inspectors examine the settings used by the Task Scheduler service to perform the task. These settings include dealing with starts, restarts and stops, how to manage hidden or multiple tasks, and more.

## Version Platforms

8.0.584.0Windows

Creation:

- setting of <task definition> : task settings

Properties:

- allow demand start of <task settings> : boolean
- allow hard terminate of <task settings> : boolean
- at compatibility of <task settings> : boolean
- delete expired task after of <task settings> : time interval
- disallow start when on battery of <task settings> : boolean
- enabled of <task settings> : boolean
- execution time limit of <task settings> : time interval
- hidden of <task settings> : boolean
- idle setting of <task settings> : task idle settings
- ignore new instance of <task settings> : boolean
- network setting of <task settings> : task network settings
- parallel instance of <task settings> : boolean
- priority of <task settings> : integer
- queue instance of <task settings> : boolean
- restart count of <task settings> : integer
- restart interval of <task settings> : time interval
- run only when idle of <task settings> : boolean
- run only when network available of <task settings> : boolean
- start when available of <task settings> : boolean
- stop existing instance of <task settings> : boolean
- stop when going on battery of <task settings> : boolean
- v1 compatibility of <task settings> : boolean
- v2 compatibility of <task settings> : boolean
- wake to run of <task settings> : boolean
- xml of <task settings> : string

## task trigger

Task triggers for the Task Scheduler have properties that identify and modify the action of each trigger.

### Version Platforms

8.0.584.0Windows

Creation:

- trigger of <task definition> : task trigger

Properties:

- enabled of <task trigger> : boolean
- end boundary of <task trigger> : time
- execution time limit of <task trigger> : time interval
- id of <task trigger> : string
- repetition of <task trigger> : task repetition pattern
- start boundary of <task trigger> : time
- type of <task trigger> : task trigger type

Casts:

- <task trigger> as boot task trigger : boot task trigger
- <task trigger> as daily task trigger : daily task trigger
- <task trigger> as event task trigger : event task trigger
- <task trigger> as idle task trigger : idle task trigger
- <task trigger> as logon task trigger : logon task trigger
- <task trigger> as monthly task trigger : monthly task trigger
- <task trigger> as monthlydown task trigger : monthlydown task trigger
- <task trigger> as registration task trigger : registration task trigger
- <task trigger> as session state change task trigger : session state change task trigger
- <task trigger> as time task trigger : time task trigger
- <task trigger> as weekly task trigger : weekly task trigger

## task trigger type

The <task trigger type> objects represent the possible types of triggers used by the Task Scheduler to fire off a task. Tasks can be triggered by dates, user actions and system events.

### Version Platforms

8.0.584.0Windows

Creation:

- boot task trigger type : task trigger type
- daily task trigger type : task trigger type
- event task trigger type : task trigger type
- idle task trigger type : task trigger type
- logon task trigger type : task trigger type
- monthly task trigger type : task trigger type
- monthlydow task trigger type : task trigger type
- registration task trigger type : task trigger type
- session state change task trigger type : task trigger type
- task trigger type <integer> : task trigger type
- time task trigger type : task trigger type
- type of <task trigger> : task trigger type
- weekly task trigger type : task trigger type

Operators:

- <task trigger type> = <task trigger type> : boolean

## time task trigger

Time triggers are used by the Task Scheduler to launch a task at a specific date and time.

### Version Platforms

8.0.584.0Windows

Creation:

- <task trigger> as time task trigger : time task trigger

Properties:

- random delay of <time task trigger> : time interval

## **weekly task trigger**

Weekly triggers are used by the Task Scheduler to launch a task at a specific time of day on a weekly schedule, such as 9:00 PM every other Friday.

### **Version Platforms**

8.0.584.0Windows

Creation:

- <task trigger> as weekly task trigger : weekly task trigger

Properties:

- days run of <weekly task trigger> : day of week
- random delay of <weekly task trigger> : time interval
- weeks interval of <weekly task trigger> : time interval

## **wmi**

A <wmi> object provides access to the WMI (Windows Management Instrumentation) query facility. This object provides access to a large amount of configuration and client-specific data.

### **Version Platforms**

8.0.584.0Windows

Creation:



- full wmi <string> : wmi
- rsop computer wmi : wmi
- rsop user wmi <security identifier> : wmi
- wmi : wmi
- wmi <string> : wmi

#### Properties:

- select <string> of <wmi> : wmi select
- select object <string> of <wmi> : wmi object

### wmi object

The <wmi object> inspectors allow you to analyze the properties of WMI objects.

#### Version Platforms

8.0.584.0Windows

#### Creation:

- select object <string> of <wmi> : wmi object

#### Properties:

- property <string> of <wmi object> : wmi select
- property of <wmi object> : wmi select

#### Casts:

- <wmi object> as string : string

### wmi select

The <wmi select> object represents a value returned as a result of a WMI select query.

You can find more information at the MSDN Library (<http://msdn.microsoft.com/library/>)

under WMI Classes. WMI inspectors can provide you with useful information about your Client computers. For instance, to get the asset tag from a dell, use: string value of select "SerialNumber from Win32\_systemenclosure" of wmi.

### **Version Platforms**

8.0.584.0Windows

Creation:

- property <string> of <wmi object> : wmi select
- property of <wmi object> : wmi select
- select <string> of <wmi> : wmi select

Properties:

- boolean value <integer> of <wmi select> : boolean
- boolean value of <wmi select> : boolean
- integer value <integer> of <wmi select> : integer
- integer value of <wmi select> : integer
- name of <wmi select> : string
- string value <integer> of <wmi select> : string
- string value of <wmi select> : string
- time value <integer> of <wmi select> : time
- time value of <wmi select> : time
- type of <wmi select> : integer

Casts:

- <wmi select> as string : string

### **audit policy**

The <audit policy> inspectors return the policies put in place for recording information about security-related operations on the client computer. For example, you can set a policy to monitor the modification of files. This will trigger an audit entry showing whenever a

file is modified, the associated user account, and the date and time of the action. You can audit both successful and failed attempts at actions. Often, the failed attempts are more interesting, as they may indicate attempts to unsuccessfully subvert a policy. For instance, a successful login is not as interesting as a repeated failure might be.

### **Version Platforms**

8.0.584.0Windows

Creation:

- audit policy : audit policy

Properties:

- account logon category of <audit policy> : audit policy category
- account management category of <audit policy> : audit policy category
- category of <audit policy> : audit policy category
- detailed tracking category of <audit policy> : audit policy category
- ds access category of <audit policy> : audit policy category
- logon logoff category of <audit policy> : audit policy category
- object access category of <audit policy> : audit policy category
- policy change category of <audit policy> : audit policy category
- privilege use category of <audit policy> : audit policy category
- system category of <audit policy> : audit policy category

### **audit policy category**

Windows audit policies, as of Vista and later, are divided into categories. Currently there are 9 categories, including System, Logon/Logoff, Object Access, Privilege Use, Detailed Tracking, Policy Change, Account Management, DS Access and Account Logon.

### **Version Platforms**

8.0.584.0Windows

Creation:

- account logon category of <audit policy> : audit policy category
- account management category of <audit policy> : audit policy category
- category of <audit policy> : audit policy category
- detailed tracking category of <audit policy> : audit policy category
- ds access category of <audit policy> : audit policy category
- logon logoff category of <audit policy> : audit policy category
- object access category of <audit policy> : audit policy category
- policy change category of <audit policy> : audit policy category
- privilege use category of <audit policy> : audit policy category
- system category of <audit policy> : audit policy category

Properties:

- name of <audit policy category> : string
- subcategory of <audit policy category> : audit policy subcategory

## **audit policy information**

The <audit policy information> inspectors return the two attributes of the audit policy for a given subcategory: whether or not successful operations will be audited ("audit success"), and whether or not unsuccessful operations will be audited ("audit failure").

### **Version Platforms**

8.0.584.0Windows

Creation:

- effective policy <security account> of <audit policy subcategory> : audit policy information
- per user policy <security account> of <audit policy subcategory> : audit policy information
- system policy of <audit policy subcategory> : audit policy information

Properties:

- audit failure of <audit policy information> : boolean
- audit success of <audit policy information> : boolean
- guid of <audit policy information> : string

## audit policy subcategory

Windows audit policy categories, as of Vista and later, are divided into about 50 subcategories. This level of granularity is designed to narrow in on specific security-related operations on the client computer, helping to filter out the normal noise of an active environment.

### Version Platforms

8.0.584.0Windows

Creation:

- subcategory of <audit policy category> : audit policy subcategory

Properties:

- effective policy <security account> of <audit policy subcategory> : audit policy information
- guid of <audit policy subcategory> : string
- name of <audit policy subcategory> : string
- per user policy <security account> of <audit policy subcategory> : audit policy information
- system policy of <audit policy subcategory> : audit policy information

## registry

The <registry> objects are the inspectors that expose the Windows registry.

### Version Platforms

8.0.584.0Windows

Creation:

- native registry : registry
- registry : registry
- x32 registry : registry
- x64 registry : registry

#### Properties:

- application <string> of <registry> : application
- application folder <string> of <registry> : folder
- application of <registry> : application
- current user key <logged on user> of <registry> : registry key
- current user key of <registry> : registry key
- device key <string> of <registry> : registry key
- device key of <registry> : registry key
- file extension <string> of <registry> : registry key
- file type <string> of <registry> : registry key
- key <string> of <registry> : registry key

## registry key

The <registry key> objects represent Windows registry keys whose existence and properties can be inspected. Keys can be identified by name. There are several inspectors that return keys from parts of the registry that store file associations and active device drivers.

### Version Platforms

8.0.584.0Windows

#### Creation:

- current user key <logged on user> of <registry> : registry key
- current user key of <registry> : registry key
- device key <string> of <registry> : registry key
- device key of <registry> : registry key
- driver key of <active device> : registry key

- file extension <string> of <registry> : registry key
- file type <string> of <registry> : registry key
- key <string> of <registry> : registry key
- parent key of <registry key value> : registry key
- user key of <logged on user> : registry key

#### Properties:

- application <string> of <registry key> : application
- application folder <string> of <registry key> : folder
- application folder of <registry key> : folder
- application of <registry key> : application
- default value of <registry key> : registry key
- value driver key of <registry key> : registry key
- key <string> of <registry key> : registry key
- key of <registry key> : registry key
- last write time of <registry key> : time
- name of <registry key> : string
- parent key of <registry key> : registry key
- pathname of <registry key> : string
- security descriptor of <registry key> : security descriptor
- value <string> of <registry key> : registry key value
- value of <registry key> : registry key value
- wow64 of <registry key> : boolean

#### Casts:

- <registry key> as string : string

### registry key value

The <registry key value> inspectors are used to access values stored within a registry key. All values have sizes and types. All of the values of a registry key have names except one, and it is called the 'default value'. The type of the data stored in the value determines what

casting operations are allowed. We have implemented several casting inspectors that you can use to extract values from the registry.

## Version Platforms

8.0.584.0Windows

Creation:

- default value of <registry key> : registry key value
- value <string> of <registry key> : registry key value
- value of <registry key> : registry key value

Properties:

- name of <registry key value> : string
- parent key of <registry key value> : registry key
- size of <registry key value> : integer
- type of <registry key value> : registry key value type

Casts:

- <registry key value> as application : application
- <registry key value> as file : file
- <registry key value> as folder : folder
- <registry key value> as integer : integer
- <registry key value> as string : string
- <registry key value> as system file : file
- <registry key value> as system x32 file : file
- <registry key value> as system x64 file : file
- <registry key value> as time : time

Operators:

- <integer> < <registry key value> : boolean
- <integer> <= <registry key value> : boolean



- <integer> = <registry key value> : boolean
- <registry key value> < <integer> : boolean
- <registry key value> < <registry key value> : boolean
- <registry key value> < <string> : boolean
- <registry key value> <= <integer> : boolean
- <registry key value> <= <registry key value> : boolean
- <registry key value> <= <string> : boolean
- <registry key value> = <integer> : boolean
- <registry key value> = <registry key value> : boolean
- <registry key value> = <string> : boolean
- <string> < <registry key value> : boolean
- <string> <= <registry key value> : boolean
- <string> = <registry key value> : boolean

## registry key value type

The type identifier of the data associated with a registry key value.

### Version Platforms

8.0.584.0Windows

Creation:

- type of <registry key value> : registry key value type

Casts:

- <registry key value type> as string : string

Operators:

- <integer> < <registry key value type> : boolean
- <integer> <= <registry key value type> : boolean
- <integer> = <registry key value type> : boolean
- <registry key value type> < <integer> : boolean

- <registry key value type> < <registry key value type> : boolean
- <registry key value type> < <string> : boolean
- <registry key value type> <= <integer> : boolean
- <registry key value type> <= <registry key value type> : boolean
- <registry key value type> <= <string> : boolean
- <registry key value type> = <integer> : boolean
- <registry key value type> = <registry key value type> : boolean
- <registry key value type> = <string> : boolean
- <string> < <registry key value type> : boolean
- <string> <= <registry key value type> : boolean
- <string> = <registry key value type> : boolean

## event log

The <event log> inspectors return information about the specified Windows Event logs, including the System, Security and the Application log.

### Version Platforms

8.0.584.0Windows

Creation:

- application event log : event log
- event log <string> : event log
- security event log : event log
- system event log : event log

Properties:

- oldest record number of <event log> : integer
- record <integer> of <event log> : event log record
- record count of <event log> : integer
- record of <event log> : event log record

## event log event type

The <event log event type> inspectors return information about the types of Windows Event log entries, which record various operating system events including errors, warnings and general information.

### Version Platforms

8.0.584.0Windows

Creation:

- audit failure event log event type : event log event type
- audit success event log event type : event log event type
- error event log event type : event log event type
- event log event type <integer> : event log event type
- event type of <event log record> : event log event type
- information event log event type : event log event type
- warning event log event type : event log event type

Operators:

- <event log event type> = <event log event type> : boolean

## event log record

The <event log record> inspectors return individual records from the Windows Event logs, which record information about operating system events.

### Version Platforms

8.0.584.0Windows

Creation:

- record <integer> of <event log> : event log record
- record of <event log> : event log record

Properties:

- category of <event log record> : integer
- computer of <event log record> : string
- description of <event log record> : string
- event id of <event log record> : integer
- event type of <event log record> : event log event type
- length of <event log record> : integer
- record number of <event log record> : integer
- source of <event log record> : string
- time generated of <event log record> : time
- time written of <event log record> : time
- user sid of <event log record> : security identifier
- xml of <event log record> : xml dom node

## **winrt enumeration**

No documentation exists.

### **Version Platforms**

9.0.777.0Windows

Creation:

- architecture of <winrt package id> : winrt enumeration
- install state of <winrt package user information> : winrt enumeration

Properties:

- name of <winrt enumeration> : string
- value of <winrt enumeration> : integer

Casts:

- <winrt enumeration> as string : string

## winrt package

No documentation exists.

### Version Platforms

9.0.777.0Windows

Creation:

- winrt package : winrt package
- winrt package <string> : winrt package
- winrt package of <user> : winrt package

Properties:

- id of <winrt package> : winrt package id
- installed path of <winrt package> : folder
- winrt package user of <winrt package> : winrt package user information

Casts:

- <winrt package> as string : string

## winrt package id

No documentation exists.

### Version Platforms

9.0.777.0Windows

Creation:

- id of <winrt package> : winrt package id

Properties:

- architecture of <winrt package id> : winrt enumeration

- family name of <winrt package id> : string
- full name of <winrt package id> : string
- name of <winrt package id> : string
- publisher id of <winrt package id> : string
- publisher of <winrt package id> : string
- version of <winrt package id> : version

## winrt package user information

No documentation exists.

### Version Platforms

9.0.777.0Windows

Creation:

- winrt package user of <winrt package> : winrt package user information

Properties:

- install state of <winrt package user information> : winrt enumeration
- sid of <winrt package user information> : security identifier

Casts:

- <winrt package user information> as string : string

## metabase

The IIS metabase is similar in structure to the Windows Registry, providing hierarchal storage of IIS configuration properties for Web sites, virtual directories, FTP, and more.

### Version Platforms

8.0.584.0Windows

Creation:

- metabase : metabase

Properties:

- key <string> of <metabase> : metabase key
- key of <metabase> : metabase key

## metabase identifier

The <metabase identifier> objects are unique numerical identifiers which IIS recognizes internally.

### Version Platforms

8.0.584.0Windows

Creation:

- identifier of <metabase value> : metabase identifier

Casts:

- <metabase identifier> as integer : integer
- <metabase identifier> as string : string

Operators:

- <metabase identifier> = <metabase identifier> : boolean

## metabase key

Like a registry key, a metabase key contains named properties about the IIS metabase.

### Version Platforms

8.0.584.0Windows

Creation:

- key <string> of <metabase> : metabase key
- key of <metabase> : metabase key

Properties:

- key <string> of <metabase key> : metabase key
- key of <metabase key> : metabase key
- name of <metabase key> : string
- value of <metabase key> : metabase value

## **metabase type**

The type identifier of the data associated with a metabase key value.

### **Version Platforms**

8.0.584.0Windows

Creation:

- type of <metabase value> : metabase type

Casts:

- <metabase type> as integer : integer
- <metabase type> as string : string

Operators:

- <metabase type> = <metabase type> : boolean

## **metabase user type**

The user type is a DWORD that specifies how the property value is used. User types enable IIS to classify properties by application.



**Version Platforms**

8.0.584.0Windows

Creation:

- user type of <metabase value> : metabase user type

Casts:

- <metabase user type> as integer : integer
- <metabase user type> as string : string

Operators:

- <metabase user type> = <metabase user type> : boolean

**metabase value**

This inspector is used to access values stored in an IIS metabase key. The type of the data stored in the value determines what casting operations are allowed. There are several casting inspectors that you can use to extract values from the registry.

**Version Platforms**

8.0.584.0Windows

Creation:

- value of <metabase key> : metabase value

Properties:

- identifier of <metabase value> : metabase identifier
- inherit attribute of <metabase value> : boolean
- insert path attribute of <metabase value> : boolean
- reference attribute of <metabase value> : boolean
- secure attribute of <metabase value> : boolean

- type of <metabase value> : metabase type
- user type of <metabase value> : metabase user type
- volatile attribute of <metabase value> : boolean

Casts:

- <metabase value> as integer : integer
- <metabase value> as string : string

## local mssql database

The <local mssql database> inspectors retrieve the properties of the MS SQL databases on the local machine.

### Version Platforms

8.0.584.0Windows

Creation:

- local mssql database : local mssql database
- local mssql database <string> : local mssql database

Properties:

- audit level of <local mssql database> : integer
- has blank sa password of <local mssql database> : boolean
- instance name of <local mssql database> : string
- login mode of <local mssql database> : integer
- running of <local mssql database> : boolean

## XML

## xml dom document

The encoding of the file to use must be the one specified in the first line of the XML document.

For example, if the first line of the XML document is `<?xml version="1.0" encoding="UTF-8" ?>`, then the file must be encoded in UTF-8.

Version	Platforms
8.0.584.0	Session, Windows
9.2.7.53	Debian, Red Hat, SUSE, Ubuntu
9.5.13.130	Raspbian

Creation:

- owner document of `<xml dom node>` : xml dom document
- xml document of `<file>` : xml dom document
- xml document of `<string>` : xml dom document

## xml dom node

The `<xml dom node>` objects are the inspectors for the XML Document Object Module (DOM) nodes. The console uses MSXML 6.0 if it is available. Otherwise it falls back to 4.0. The console requires at least 4.0 since 3.0 does not provide XML schema validation.

Version	Platforms
8.0.584.0	Session, Windows
9.2.7.53	Debian, Red Hat, SUSE, Ubuntu
9.5.13.130	Raspbian

Creation:

- xml of `<event log record>` : xml dom node

Properties:

- attribute `<integer>` of `<xml dom node>` : xml dom node

- attribute <string> of <xml dom node> : xml dom node
- attribute of <xml dom node> : xml dom node
- child node <integer> of <xml dom node> : xml dom node
- child node of <xml dom node> : xml dom node
- first child of <xml dom node> : xml dom node
- last child of <xml dom node> : xml dom node
- next sibling of <xml dom node> : xml dom node
- node name of <xml dom node> : string
- node type of <xml dom node> : integer
- node value of <xml dom node> : string
- owner document of <xml dom node> : xml dom document
- parent node of <xml dom node> : xml dom node
- previous sibling of <xml dom node> : xml dom node
- select <string> of <xml dom node> : xml dom node
- xpath <( string, string )> of <xml dom node> : xml dom node
- xpath <string> of <xml dom node> : xml dom node

#### Casts:

- <xml dom node> as text : string
- <xml dom node> as xml : string

# Chapter 5. Examples

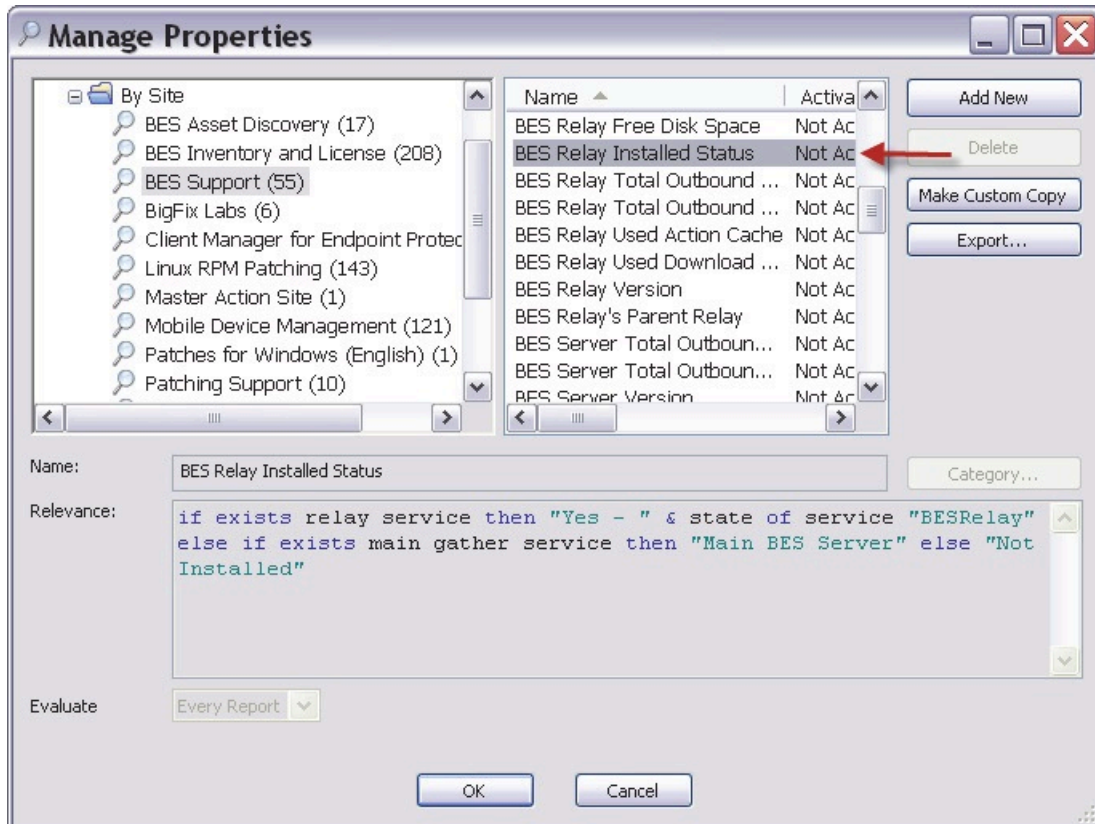
This page is a container for use case scenarios showing how to use custom content created using the BigFix languages. You can easily follow the steps listed in the scenario to reproduce it in your test environment. Each scenario listed in this page has been verified for completeness and accuracy.

## Creating a computer group

In this scenario, an existing relevance for a single property is used to create an automatic group that contains any system that has the BigFix server or relay installed.

This example uses the BigFix console and the Fixlet Debugger to test the Relevance.

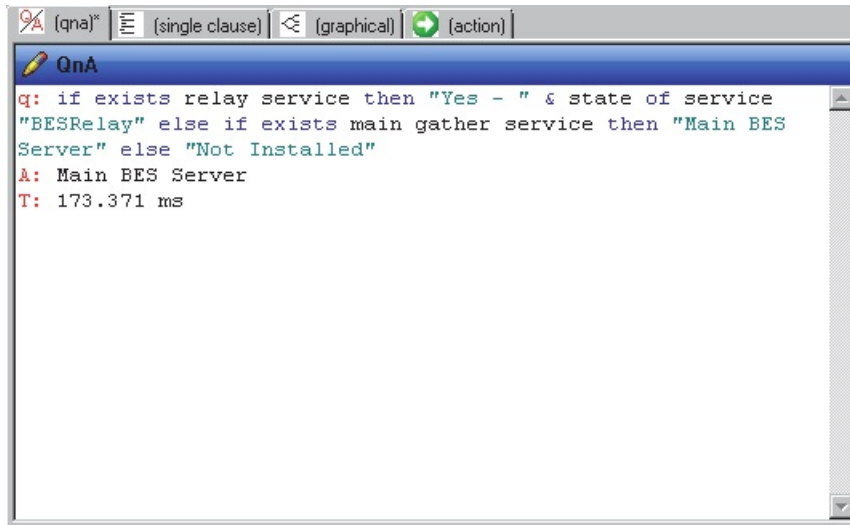
1. On the BigFix console, select the **All Content** domain.
2. Click the **Computers** node on the displayed navigation tree.
3. Right-click the retrieved properties column headings to display the Column Picker.
4. Click **Manage Properties** at the bottom of the Column Picker window. The Manage Properties Window opens.
5. In the left pane, expand the **By Site** node.
6. Click the **BES Support** site.
7. In the right pane, scroll down and click the **BES Relay Installed Status** property.



8. In the Relevance window, select the Relevance statement (CTRL+A) and copy it.
9. Click **Cancel** to close the Manage Properties window.
10. Open the Fixlet Debugger by selecting **Start > All Programs > BigFix > BigFix Fixlet Debugger**.
11. Select the (qna) tab.
12. Paste the Relevance statement that was copied in **Step 8** to this tab. Ensure that you add Q: to the start of the statement.

```
Q: if exists relay service then "Yes - " & state of service "BESRelay"
else
if exists main gather service then "Main BES Server" else "Not
Installed"
```

13. Evaluate the query. You should see the response *Main BES Server* displayed.



To create a group, you must develop a Relevance query that evaluates to `True`. The following steps take you through this process

14. Copy the first `if` expression from the statement that you just evaluated in **Step 13** to a new line. It is recommended that when creating Boolean expressions, you use parentheses to define the expressions. Add parentheses around this expression:

```
Q: (exists relay service)
```

This statement checks to see if the BigFix relay service is installed on the endpoint. You are not checking the status of the service with this statement; only if the service is installed.

15. At the end of the statement that you created in **Step 14**, add `OR` to force the BigFix client to evaluate the second statement if the first statement is `False`. Add open and closed parentheses after the `OR`.

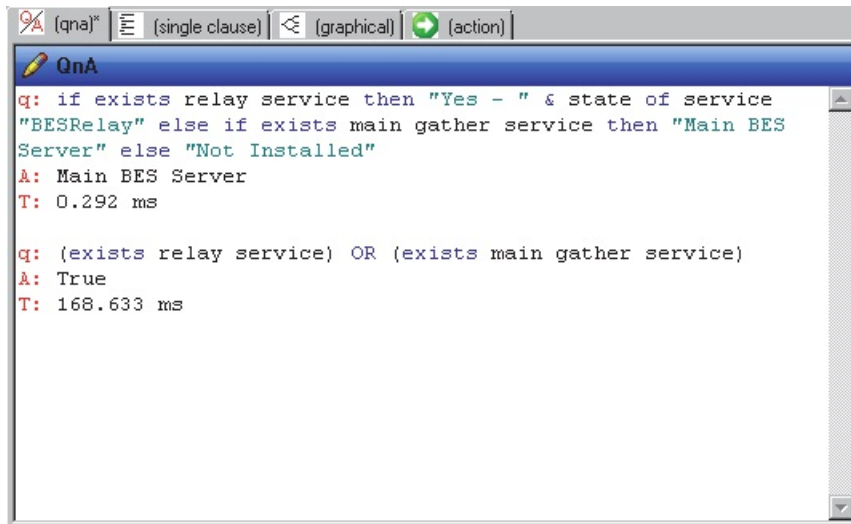
```
Q: (exists relay service) OR ( )
```

16. Copy the nested `if` expression from the statement that you evaluated in **Step 13** and paste it inside the blank parentheses in the expression that you created in **Step 15**.

```
Q: (exists relay service) OR (exists main gather service)
```

The `OR` expression checks to see if the Main Gather service is installed. This service is installed on the BigFix server, so you are now checking to see if the endpoint is a BigFix relay or a server.

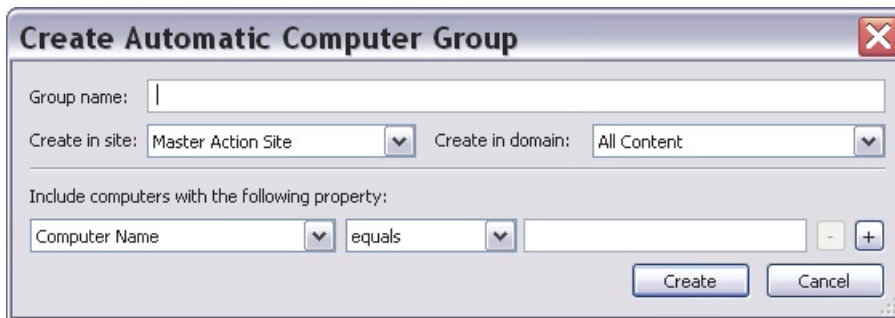
17. Evaluate the query. The query should respond with `True`.



You now have the required Relevance to create the wanted automatic group. This group contains the Infrastructure systems or those endpoints that have either the relay service or the main gather service installed.

18. Switch to the BigFix console.

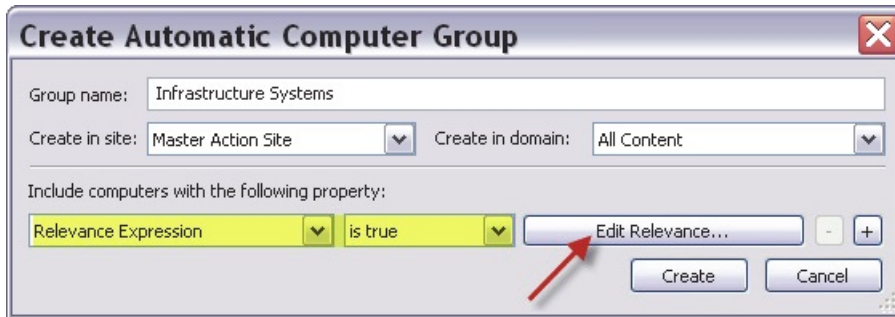
19. From the menu, select **Tools > Create New Automatic Computer Group**. The create New Automatic Computer Group window is displayed.



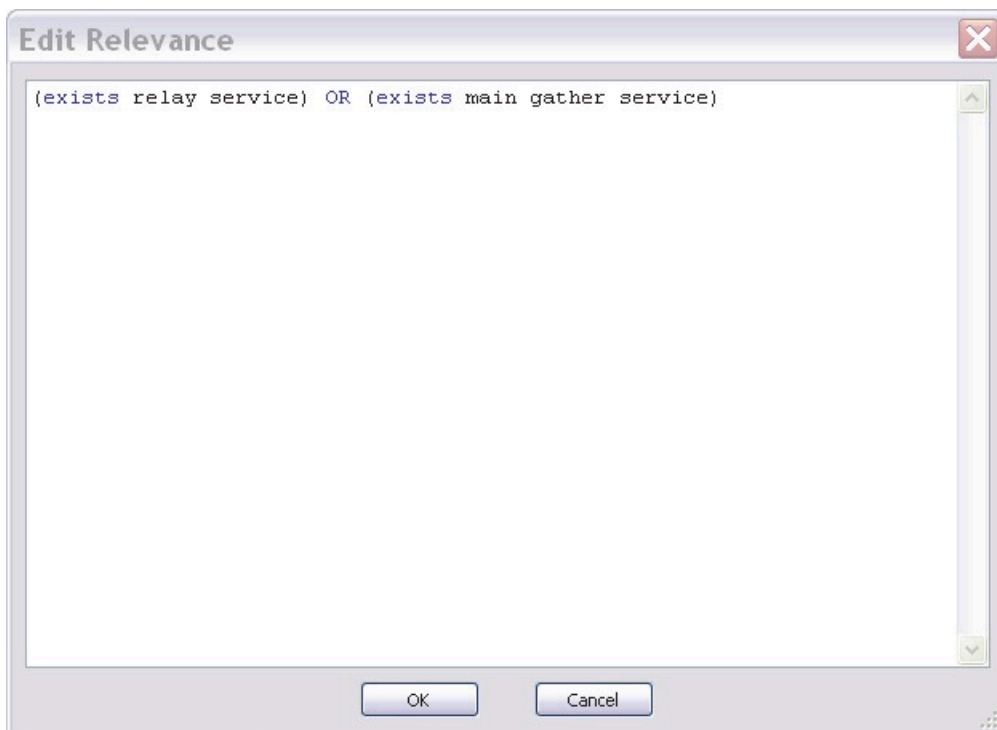
20. Enter **Infrastructure Systems** for the **Group name** field.

21. Leave the **Create in site** and **Create in Domain** fields at the default value. In the bottom drop-down box, change the value from **Computer Name** to **Relevance Expression**.





22. Click **Edit Relevance**. The Edit Relevance window opens.
23. In the Edit Relevance window, remove any current Relevance, copy the Relevance expression that you evaluated in **Step 17** and paste it to this window.



24. Click **OK** to save the Relevance and close this window.
25. Click **Create** to create the group.

Within the BigFix console, you now see the group details, not the resulting Relevance for the group.

26. To create a group of non-infrastructure systems, you can create a custom copy of this group with a new name and change the condition by completing the following steps:
  - a. Change the condition of the Relevance check from **is true** to **is false**.
  - b. Modify the Relevance query itself:

```
Q: (NOT exists relay service) AND (NOT exists main gather service)
```

- c. Use Group Membership by stating that any endpoint that is not a member of the **Infrastructure Systems** group is a member of the non-infrastructure group. Because there are only two potential conditions for the original group, true or false, this action ensures that any endpoint that is not a member of the group is added to the non-infrastructure group.

# Chapter 6. Support

For more information about this product, see the following resources:

- [BigFix Support Portal](#)
- [BigFix Developer](#)
- [BigFix playlist on YouTube](#)
- [BigFix Tech Advisors channel on YouTube](#)
- [BigFix Forum](#)

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