



# Functions

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PRODUCT MANUAL | Jan 17, 2018

# 1 Foreword

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# 1 Available SELLIGENT functions

## 1.1 String operations

### 1.1.1 Overview

<a href="#">LEN</a>	<a href="#">CHARINDEX/FIND</a>	<a href="#">FINDONEOF</a>	<a href="#">LASTCHARINDEX/REVERSEFIND</a>
<a href="#">REPLACE</a>	<a href="#">REVERSE</a>	<a href="#">TRIM</a>	<a href="#">LEFT</a>
<a href="#">MID</a>	<a href="#">RIGHT</a>	<a href="#">UCASE</a>	<a href="#">LCASE</a>
<a href="#">PCASE</a>	<a href="#">TRANSLATE</a>	<a href="#">&amp;</a>	<a href="#">CONTAINSTAG</a>
<a href="#">JSREPLACE</a>			

### 1.1.2 LEN

**Format:** LEN( *string* str)

**Use:** Returns the length of the specified string.

**Parameters:**

Str (string): string from which the length must be returned

**Return value:**

Integer: length of the string

**Example:**

```
Function:    LEN(@NAME) / LEN('Selligent')
```

```
Output:     9
```

### 1.1.3 CHARINDEX / FIND

**Format:** CHARINDEX( *string* needle, *string* haystack)

FIND( *string* needle, *string* haystack)

**Use:** Searches haystack for the first occurrence of needle.

**Parameters:**

Needle (string): string to find  
Haystack (string): string to be searched

**Return value:**

Integer: If needle found: offset of needle in haystack  
If needle not found: -1

**Example:**

Function:	CHARINDEX('e', @NAME)
Output:	5
Function:	CHARINDEX('e', 'Optizen')
Output:	5

### 1.1.4 FINDONEOF

**Format:** FINDONEOF( *string* needles, *string* haystack)

**Use:** Searches haystack for the first occurrence of one of the characters contained in needles

**Parameters:**

Needles (string): character to search for  
Haystack (string): string to be searched

**Return value:**

Integer: If one of the characters from needles found: offset of character in haystack  
If none found: -1

**Example:**

Function:	FINDONEOF('a,e', 'I love cats')
Output:	5

### 1.1.5 LASTCHARINDEX / REVERSEFIND

**Format:** LASTCHARINDEX( *string* needles, *string* haystack)  
REVERSEFIND( *string* needles, *string* haystack)

**Use:** Searches haystack for the last occurrence of needle

**Parameters:**

Needles (string): character to search for  
Haystack (string): string to be searched

**Return value:**

Integer: If one of the characters from needles found: last offset of character in haystack  
If none found: -1

**Example:**

Function:	LASTCHARINDEX('a', 'I love cats') REVERSEFIND('a', 'I love cats')
Output:	8

### 1.1.6 REPLACE

**Format:** REPLACE( *string* haystack, *string* originalNeedle, *string* newNeedle)

**Use:** Searches haystack for the every occurrence of originalNeedle, and replaces them with newNeedle.

**Parameters:**

Haystack (string): string to be searched  
originalNeedle (string): substring that should be replaced by another one  
newNeedle (string): String that is used to replace any occurrence of originalNeedle

**Return value:**

string: returns the modified haystack string

**Example:**

Function:	REPLACE( 'I love cats', 'cats', 'dogs')
Output:	I love dogs

### 1.1.7 REVERSE

**Format:** REVERSE( *string* str)

**Use:** Returns the reverse of a string value.

**Parameters:**

str (string): string to be reversed

**Return value:**

string: returns the reverse string

**Example:**

Function:	REVERSE('I love cats')
Output:	stac evol I

### 1.1.8 TRIM

**Format:** TRIM( *string* str)

**Use:** Trims spaces, newlines and tabs from both ends of str.

**Parameters:**

str (string): string to be trimmed

**Return value:**

string: returns the trimmed string

**Example:**

Function:	TRIM(' abc ')
Output:	abc

### 1.1.9 LEFT

**Format:** LEFT( *string* str; integer count)

**Use:** Returns the first count characters from str.

**Parameters:**

str (string): source string

count (integer): Number of characters to select, starting from the most left character

**Return value:**

string: returns the left part from str

**Example:**

Function:	LEFT('I love cats',5)
Output:	I lov

### 1.1.10 MID

**Format:** MID( *string* str; integer offset, integer count)

**Use:** count characters from the middle of str, starting at offset.

**Parameters:**

str (string): source string

offset (integer): starting offset

count (integer): Number of characters to select, starting from the offset

**Return value:**

string: returns the mid part from str

**Example:**

Function:	MID('I love cats',2,4)
Output:	love

### 1.1.11 RIGHT

**Format:** RIGHT( *string* str, integer count)

**Use:** Returns the last count characters from str.

**Parameters:**

str (string): source string

count (integer): Number of characters to select from the end of str

**Return value:**

string: returns the right part from str

**Example:**

Function:	RIGHT('I love cats',4)
Output:	cats

### 1.1.12 UCASE

**Format:** UCASE( *string* str)

**Use:** Returns str, with all characters converted to uppercase.

**Parameters:**

str (string): source string

**Return value:**

string: returns the uppercased str

**Example:**

Function:	UCASE('I love cats')
Output:	I LOVE CATS

### 1.1.13 LCASE

**Format:** LCASE( *string* str)

**Use:** Returns str, with all characters converted to lowercase.

**Parameters:**

str (string): source string

**Return value:**

string: returns the lowercased str

**Example:**

Function:	LCASE('I love cats')
Output:	i love cats

### 1.1.14 PCASE

**Format:** PCASE( *string* str)

**Use:** str, with every first character of every contained word converted to uppercase.

**Parameters:**

str (string): source string

**Return value:**

string: returns the converted str

**Example:**

Function:	PCASE('I love cats')
Output:	I Love Cats

### 1.1.15 TRANSLATE

**Format:** TRANSLATE( *string* fieldname, *string* multivalue, *string* separator1, *string* separator2)

**Use:** Translates the multivalue, will separate all values with separator1, except for the last value; that will be separated by separator2.

**Parameters:**

- Fieldname (string): Name of the field to which the option list is linked
- Multivalue (string): string to be translated
- Seperator1 (string): Seperator1
- Seperator2 (string): Seperator2

**Return value:**

string: returns the converted translated value

**Example:**

This example is for a user with a value "1,2,3,6" in the INTEREST-field on his profile

On this field the following field options are defined:

- 1 Sports
- 2 Politics
- 3 Movies
- 4 Cars
- 5 Animals
- 6 Nature

While ~\$INTERESTS~ would return "Sports, Politics, Movies, Nature", this function allows us to set the separators

Function:     TRANSLATE('INTERESTS',INTERESTS,',',' and') where INTERESTS is the name of the field in the audience list

Output:       Sports, Politics, Movies and Nature

Function:     '<UL><LI>' & TRANSLATE('INTERESTS', INTERESTS, '</LI><LI>', '</LI><LI>') & '</LI></UL>'

Output:       <UL><LI>Sports</LI><LI>Politics</LI><LI>Movies</LI><LI>Nature</LI></UL>

### 1.1.16 &

**Format:** *string* str1 & *string* str2 & *string* strn

**Use:** Concatenates the strings.

**Parameters:**

- Str1 (string): First string
- Str2 (string): Second string
- Strn (string): Nth string

**Return value:**

string: returns the concatenated string

**Example:**

Function: 'I' & ' Love ' & 'Cats'

Output: I Love Cats

### 1.1.17 CONTAINSTAG

**Format:** CONTAINSTAG(*string* haystack, *string* needle)

**Use:** search for a string within a string

**Parameters:**

- haystack (string): string to be searched
- needle (string): string to search for

**Return value:**

string: returns 1 if needle was found

**Example:**

Function: CONTAINSTAG('CAT,DOG,Frog,doggybag,hotdog','dog')

Output: 1

  

Function: CONTAINSTAG('CAT,DOG,Frog,doggybag,hotdog','doggy')

Output: 0

### 1.1.1 JSREPLACE

**Format:** JSREPLACE(*string* variable)

**Use:** Automatically escapes single quotes and removes parentheses from the variable to be used in javascript.

**Parameters:**

variable (string): string to be searched

**Return value:**

string: returns the escapes/modified string

**Example:**

```
Function: JSREPLACE(@VARIABLE)//where @VARIABLE is ab(cd'ef)gh
Output:   abcd\'efgh
```

### 1.1.2 GETPROP (New 6.3.4)

**Format:** GETPROP(*str*, *idx*, *sep*)

**Use:** Automatically escapes single quotes and removes parentheses from the variable to be used in javascript.

**Parameters:**

str: string containing the properties

Idx; 1-based property index

Sep: optional - string containing accepted separators

**Return value:**

string

**Example:**

```
Function: GETPROP('Barcelona; Brussels; New York',3,';')
Output:   New York
```

## 1.2 Math functions

### 1.2.1 Overview

[ABS](#)

[AVG](#)

[FMUL](#)

[FDIV](#)

[FADD](#)

[FSUB](#)

[FABS](#)

[FROUND](#)

[FCOMPARE](#)

[% \(MODULO\)](#)

[FORMATNUMBER](#)

### 1.2.2 ABS

**Format:** *ABS(integer number)*

**Use:** number, without sign. (basically converts negative numbers to positive ones).

**Parameters:**

Number (integer): Number to convert

**Return value:**

integer: returns the converted number

**Example:**

Function: ABS(5)

Output: 5

Function: ABS(-5)

Output: 5

### 1.2.3 AVG

**Format:** *AVG(integer number\_1, integer number\_2, .... Integer number\_n)*

**Use:** Returns the average of the provided numbers

**Parameters:**

Number\_n (integer):

**Return value:**

integer: returns the calculated number

**Example:**

Function:	AVG(1,2,3,4,5)
Output:	3

### 1.2.4 FMUL

**Format:** FMUL(*float* number\_1, *float* number\_2)

**Use:** Returns the floating point result of multiplying number\_1 with number\_2.

**Parameters:**

Number\_1,number\_2 (float):numbers to multiply

**Return value:**

float

**Example:**

Function:	FMUL(1.2,3.4)
Output:	4.08

### 1.2.5 FDIV

**Format:** FDIV(*float* nominator, *float* denominator)

**Use:** Returns the floating point result of the division of nominator with denominator.

**Parameters:**

nominator (float)  
denominator (float)

**Return value:**

float

**Example:**

Function:	FDIV(3.4, 1.2)
Output:	2.83

### 1.2.6 FADD

**Format:** FADD(*float* number\_1, *float* number\_2)

**Use:** Returns the floating point result of adding number\_1 with number\_2.

**Parameters:**

Number\_1 (float)

Number\_2 (float)

**Return value:**

float

**Example:**

Function:	FADD(3.4, 1.2)
Output:	4.60

### 1.2.7 FSUB

**Format:** FSUB(float number\_1, float number\_2)

**Use:** Returns the floating point result of subtracting number\_2 from number\_1.

**Parameters:**

Number\_1 (float)

Number\_2 (float)

**Return value:**

float

**Example:**

Function:	FSUB(3.4, 1.2)
Output:	2.20

## 1.2.8 FABS

**Format:** FABS(*float number*)

**Use:** converts negative float numbers to positive ones.

**Parameters:**

Number (float): number to convert

**Return value:**

float: the converted number

**Example:**

Function:	FABS(5.23)
Output:	5.23
Function:	FABS(-5.23)
Output:	5.23

## 1.2.9 FROUND

**Format:** FROUND(*float number, int digits*)

**Use:** rounds the float number to the specified number of digits.

**Parameters:**

Number (float): number to convert

Digits (int): number of digits

**Return value:**

string: returns the rounded number

**Example:**

Function:	FROUND(1.23456,3)
Output:	1.235
Function:	FROUND(1.23456, 1)
Output:	1.2

### 1.2.10 FCOMPARE

**Format:** FCOMPARE(*float* number1, *float* number2)

**Use:** compares two float numbers and returns a number indicating if they are equal or not.

**Parameters:**

Number1 (float): number to evaluate

Number2 (float): number to compare with

**Return value:**

Int: returns 0 if the numbers are equal, 1 if Number 1 is bigger than Number2 and -1 if Number1 is smaller than Number 2

**Example:**

Function:	FCOMPARE(1.23,3.456)
Output:	-1
Function:	FCOMPARE(1.23, 0-3.456)
Output:	1
Function:	FCOMPARE(4.563,1.23)
Output:	1
Function:	FCOMPARE(1.23,1.23)
Output:	0

### 1.2.11 % (MODULO)

**Format:** *int* number\_1 % *int* number\_2

**Use:** calculates the remainder on a division of number\_1 by number\_2.

**Parameters:**

Number\_1 (integer): divided number

Number\_2 (integer): Divider

**Return value:**

int: the remaining number

**Example:**

Function:	3%2
Output:	1
Function:	12%8
Output:	4

### 1.2.12 FORMATNUMBER

**Format:** FORMATNUMBER(*float* value, *int* decimals, *string* thousandSeparator, *string* decimalSeparator, *string* prefix, *string* postfix)

**Use:** Formats a given number with custom separators, prefix and postfix.

**Parameters:**

Value (float): The number to format

Decimals (int): The number of decimals to show

ThousandSeparator (string): The character to show in between thousands-groups

DecimalSeparator (string): The character to show between the whole- and the decimal-part

Prefix (string): The text to show in front of the number

Postfix (string): The text to show at the end of the number

**Return value:**

string: The formatted number

**Example:**

Function:	FORMATNUMBER(1234567.1234, 2, ',', '€', ',-')
Output:	€ 1.234.567,12 ,-
Function:	FORMATNUMBER(1234567.1234, 3, ',', '!', '\$', '##')
Output:	\$ 1,234,567,123##

Function:     FORMATNUMBER(123.456, 2, ',', '.', '¥', "  
 Output:       ¥ 123.46

## 1.3 Date functions

### 1.3.1 Overview

[DATEADD](#)                    [DATEPART](#)                    [DATEDIFF](#)                    [GETDATE](#)  
[ISDATE](#)                    [FORMATDATETIME](#)            [YEAR](#)                        [MONTH](#)  
[DAY](#)                        [HOUR](#)                        [MINUTE](#)                    [SECOND](#)  
[DAYOFWEEK](#)

### 1.3.2 DATEADD

**Format:** DATEADD(*constant* datatype, *integer* amount, *datetime* date)

**Use:** Returns datetime, added with an amount of years, months, days,... depending of datatype. If the function is used with negative numbers, use singles quotes around the number.

**Parameters:**

datatype (constant)

yyyy.yy amount in years

mm.m amount in months

dd.d amount in days

hh.h amount in hours

mi.n amount in minutes

ss.s amount in seconds

amount (integer): Number of units of type datatype to add

date (datetime): date to add to

**Return value:**

Datetime: Returns the resulting datetime value

**Example:**

Function:     DATEADD('dd',4, '2009-09-24')  
 Output:       2009-09-28 00:00:00  
 Function with negative number: DATEADD('dd','-1',GetDate())

### 1.3.3 DATEPART

**Format:** DATEPART(*constant* datatype, *datetime* date)

**Use:** Returns the part of the date, indicated by datatype

**Parameters:**

datatype (constant):

- yyyy.yy amount in years
- mm.m amount in months
- wk.wks amount of weeks (Sunday based weeks)
- wkm amount of weeks (Monday based weeks)
- dd.d amount in days
- hh.h amount in hours
- mi.n amount in minutes
- ss.s amount in seconds

date (datetime): date to add to

**Return value:**

Integer: Returns the requested part of date, indicated by datatype

**Example:**

Function:	DATEPART('yyyy', '2009-09-24')
Output:	2009
Function:	DATEPART('mm', '2009-09-24')
Output:	9

### 1.3.4 DATEDIFF

**Format:** DATEDIFF(*constant* datatype, *datetime* date\_1, *datetime* date\_2)

**Use:** Returns the difference between the part of date\_1 and date\_2, indicated by datatype.

**Parameters:**

datatype (constant):

- yyyy.yy amount in years
- mm.m amount in months
- dd.d amount in days
- hh.h amount in hours
- mi.n amount in minutes
- ss.s amount in seconds

Date\_1 (datetime)

Date\_2 (datetime)

**Return value:**

Integer: Returns the difference between the requested part of date\_1 – the part of date\_2

**Example:**

```
Function:   DATEDIFF('mm', '2009-01-12','2009-09-24')
Output:    8
```

### 1.3.5 GETDATE

**Format:** GETDATE()

**Use:** Returns the current system datetime.

**Parameters:**

none

**Return value:**

datetime: Returns the current system datetime

**Example:** On September 24<sup>th</sup> 2009 at 1PM:

```
Function:   GETDATE()
Output:    2009-09-24 13:00:00
```

### 1.3.6 ISDATE

**Format:** ISDATE( *string* date)

**Use:** Returns the current system datetime.

**Parameters:**

Date (datetime): date to be checked

**Return value:**

boolean: If date appears to be valid, the return value is 1, otherwise 0

**Example:**

```
Function:   ISDATE('2009-01-12')
Output:    1
```

Function: ISDATE('2009-02-31')

Output: 0

### 1.3.7 FORMATDATETIME

**Format:** FORMATDATETIME(*datetime* date, *constant* format)

**Use:** Returns a string representation of the specified date in the supplied format..

**Parameters:**

Date (datetime): date to convert to string

Format (constant):

- %a: Abbreviated weekday name
- %A: Full weekday name
- %b: Abbreviated month name
- %B: Full month name
- %c: Date and time representation appropriate for locale
- %d: Day of month as decimal number (01 – 31)
- %H: Hour in 24-hour format (00 – 23)
- %I: Hour in 12-hour format (01 – 12)
- %j: Day of year as decimal number (001 – 366)
- %m: Month as decimal number (01 – 12)
- %M: Minute as decimal number (00 – 59)
- %p: Current locale's A.M./P.M. indicator for 12-hour clock
- %S: Second as decimal number (00 – 59)
- %U: Week of year as decimal number, with Sunday as first day of week (00 – 53)
- %w: Weekday as decimal number (0 – 6; Sunday is 0)
- %W: Week of year as decimal number, with Monday as first day of week (00 – 53)
- %x: Date representation for current locale
- %X: Time representation for current locale
- %y: Year without century, as decimal number (00 – 99)
- %Y: Year with century, as decimal number
- %z,%Z: Time-zone name or abbreviation; no characters if time zone is unknown
- %%: Percent sign

**Return value:**

string: Returns the formatted string

**Example:** On September 24<sup>th</sup> 2009 at 1PM:

Function: FORMATDATETIME(GETDATE(), '%A, %B %d, %Y')

Output: Thursday, September 24, 2009

Function:     FORMATDATETIME(GETDATE(),'%c')

Output:       09/24/09 13:53:25

Function:     FORMATDATETIME(GETDATE(),'%j')

Output:       267

### 1.3.8 YEAR

**Format:** YEAR(*string* date)

**Use:** Returns the year of the specified datetime.

**Parameters:**

    Date (datetime):

**Return value:**

    integer:

**Example:**

Function:     YEAR('2009-01-12 12:34:56')

Output:       2009

### 1.3.9 MONTH

**Format:** MONTH(*string* date)

**Use:** Returns the month of the specified datetime.

**Parameters:**

    Date (datetime):

**Return value:**

    integer:

**Example:**

Function:     MONTH('2009-01-12 12:34:56')

Output:       1

### 1.3.10 DAY

**Format:** DAY( *string* date)

**Use:** Returns the day of the specified datetime.

**Parameters:**

Date (datetime):

**Return value:**

integer:

**Example:**

```
Function: DAY('2009-01-12 12:34:56')
```

```
Output: 12
```

### 1.3.11 HOUR

**Format:** HOUR( *string* date)

**Use:** Returns the hour of the specified datetime.

**Parameters:**

Date (datetime):

**Return value:**

integer:

**Example:**

```
Function: HOUR('2009-01-12 12:34:56')
```

```
Output: 12
```

### 1.3.12 MINUTE

**Format:** MINUTE( *string* date)

**Use:** Returns the hour of the specified datetime.

**Parameters:**

Date (datetime):

**Return value:**

integer:

**Example:**

```
Function:    MINUTE('2009-01-12 12:34:56')
Output:     34
```

### 1.3.13 SECOND

**Format:** SECOND( *string* date)

**Use:** Returns the second of the specified datetime.

**Parameters:**  
Date (datetime):

**Return value:**  
integer:

**Example:**

```
Function:    SECOND('2009-01-12 12:34:56')
Output:     56
```

### 1.3.14 DAYOFWEEK

**Format:** DAYOFWEEK( *string* date)

**Use:** Returns the day of the week of the specified datetime, with Sunday as first day of week.

**Parameters:**  
Date (datetime):

**Return value:**  
integer:

**Example:**

```
Function:    DAYOFWEEK('2009-01-12 12:34:56')
Output:     2
```

### 1.3.15 GETCURRENTUNIXTIMESTAMP()

**Format:** GETCURRENTUNIXTIMESTAMP()

**Use:** retrieves the unix timestamp in milliseconds

**Parameters:** none

**Return value:** datetime

### 1.3.16 TOUNIXTIMESTAMP

**Format:** TOUNIXTIMESTAMP(date)

**Use:** converts a date to UNIX timestamp in seconds

**Parameters:** date (datetime): date to be converted

**Return value:** datetime: returns a UNIX timestamp

## 1.4 Other functions

### 1.4.1 Overview

<a href="#">CHKPROP</a>	<a href="#">PROPCOUNT</a>	<a href="#">MATCHCOUNT</a>	<a href="#">MAKELEN</a>
<a href="#">IF</a>	<a href="#">URLENCODE</a>	<a href="#">URLDECODE</a>	<a href="#">H2U</a>
<a href="#">H2A</a>	<a href="#">U2H</a>	<a href="#">A2H</a>	<a href="#">CHKMAIL</a>
<a href="#">ISNUMERIC</a>	<a href="#">CONVERTPHONENUMBER</a>	<a href="#">UTF8</a>	<a href="#">UTF8DECODE</a>
<a href="#">CONVERTCHARSET</a>	<a href="#">MDENCODE</a>	<a href="#">GETCAMPAIGNID</a>	<a href="#">GETACTIONID</a>
<a href="#">GETLISTID</a>	<a href="#">GETUSERID</a>	<a href="#">GETPROBEID</a>	<a href="#">GETTRIGGERID</a>
<a href="#">GETCATALOGLISTID</a>	<a href="#">GETCATALOGITEMID</a>		<a href="#">CHKBANKACCOUNT</a>
<a href="#">GENERATEPWD</a>	<a href="#">CHKREGEX</a>	<a href="#">GENERATEGUID</a>	

### 1.4.2 CHKPROP

**Format:** CHKPROP( *string* multivalued, *string* value)

**Use:** Searches a SELLIGENT multivalued (pipe or comma separated string) for the occurrence of value.

**Parameters:**

multivalue (string): string to search  
 value (string); string to find

**Return value:**

Boolean: If value found; returns 1, otherwise 0

**Example:**

Function:	CHKPROP('a,b,c,d,e','b')
Output:	1
Function:	CHKPROP('a,b,c,d,e','z')
Output:	0

### 1.4.3 PROPCOUNT

**Format:** PROPCOUNT( *string* multivalue)

**Use:** the amount of values, contained in the SELLIGENT multivalue.

**Parameters:**

multivalue (string): string to search

**Return value:**

integer: The amount of contained values

**Example:**

Function:	PROPCOUNT('a,b,c,d,e')
Output:	5

### 1.4.4 MATCHCOUNT

**Format:** MATCHCOUNT( *string* multivalue\_1, *string* multivalue\_2)

**Use:** Counts the amount of values that match between the 2 SELLIGENT multivalues.

**Parameters:**

Multivalue\_1 (string)  
 Multivalue\_2 (string)

**Return value:**

integer: The amount of matched values found

**Example:**

```
Function:    MATCHCOUNT('a,b,c,d,e','b,d,e,f,g')
Output:     3
```

### 1.4.5 MAKELEN

**Format:** MAKELEN(*int* number, *int* desiredlen)

**Use:** If the amount of decimals in number is lower than desiredlen, the number is prefixed with '0's, until the length matches with desiredlen.

**Parameters:**

- number (integer): number
- desiredlen (integer): string to find

**Return value:**

integer: number decreased or completed to the desired length

**Example:** For user 1 in the list:

```
Function:    MAKELEN(ID,5)
Output:     00001
```

### 1.4.6 IF

**Format:** IF(*Boolean* constraint, *variant* ifTrue, *variant* ifFalse)

**Use:** ifTrue if constraint evaluates to true, otherwise returns ifFalse.

**Parameters:**

- constraint (boolean): Constraint to evaluate. Can be a combination or nesting of every supported SELLIGENT function
- ifTrue (variant): Return value if constraint evaluates to true
- ifFalse (variant): Return value if constraint evaluates to false

**Return value:**

variant: ifTrue or ifFalse, depending of the evaluation of constraint

**Example:**

```
Function:    IF('A'='A','Identical', 'Different')
Output:     Identical
```

Function: IF('A'='B','Identical', 'Different')

Output: Different

### 1.4.7 URLENCODE

**Format:** URLENCODE(*string* value)

**Use:** Returns the urlencoded version of value.

**Parameters:**  
value (string): value to convert

**Return value:**  
string: Urlencoded version of value

**Example:**

Function: URLENCODE('info@selligent.com')

Output: info%40selligent%2Ecom

### 1.4.8 URLDECODE

**Format:** URLDECODE(*string* encodedvalue)

**Use:** Returns the urldecoded version of value.

**Parameters:**  
encodedvalue (string): value to convert

**Return value:**  
string: Urldecoded version of encodedvalue

**Example:**

Function: URLDECODE('info%40selligent%2Ecom')

Output: info@selligent.com

## 1.4.9 H2U

**Format:** H2U(*string* str)

**Use:** Converts the html encoded values contained in str to a Unicode string (this function only performs a conversion on a Unicode installation; for ansi installations, the returnvalue is identical to the supplied parameter, without doing a conversion)..

**Parameters:**

str (string): String containing html encoded values (&# + ASCII-value) to convert to unicode

**Return value:**

String: converted str

**Example:**

Function:	H2U('&#64;')
Output:	@

## 1.4.10 H2A

**Format:** H2A(*string* str)

**Use:** Converts the html encoded values contained in str to an Ansi string (this function works on both Ansi and Unicode installations, but will only perform a conversion of Htmleencoded values within the ansi range (0-0xff) ).

**Parameters:**

str (string): String containing html encoded values to convert to ansi

**Return value:**

String: converted str

**Example:**

Function:	H2A('&#64;')
Output:	@

## 1.4.11 U2H (only available in Unicode version of SELLIGENT)

**Format:** U2H(*string* str)

**Use:** Converts the Unicode characters in str that are out of the standard range ( >0x7F) to their html encoded values. (this function only performs a conversion on a Unicode installation; for ansi installations, the return value is identical to the supplied parameter, without doing a conversion).

**Parameters:**

str (string): String containing unicode characters that are out of the standard range

**Return value:**

String: converted str

**Example:**

Function:	U2H('@')
Output:	@ (character is in standard range, hence no transformation)
Function:	U2H('ö')
Output:	&#246;

### 1.4.12 A2H (only available in Unicode version of SELLIGENT)

**Format:** A2H(*string* str)

**Use:** Converts the ansi characters in str that are out of the standard range ( >0x7F) to their html encoded values. (this function works on both Ansi and Unicode installations, but will only perform a conversion of values within the ansi range (0-0xff) ).

**Parameters:**

str (string): String containing ansi characters that are out of the standard range

**Return value:**

String: converted str

**Example:**

Function:	A2H('@')
Output:	@ (character is in standard range, hence no transformation)
Function:	A2H('ö')
Output:	&#246;

### 1.4.13 CHKMAIL

**Format:** CHKMAIL( *string* emailaddress [, *integer* timeout])

**Use:** Performs a basic syntax check of the supplied email address

If the optional parameter `timeout` has been specified, the function will perform a physical check of the email address on the appropriate domain

**Parameters:**

Email address (string): Email address to check  
timeout (integer): Optional; unit is in milliseconds

**Return value:**

boolean: If email address is valid, the return value is 1, otherwise 0

**Example:**

```
Function: CHKMAIL('info@selligent.com')  
Output: 1  
  
Function: CHKMAIL('infoselligent.com')  
Output: 0  
  
Function: CHKMAIL('info@selligent.com',3000)  
Output: 1
```

### 1.4.14 ISNUMERIC

**Format:** ISNUMERIC( *variant* param)

**Use:** Checks if param is (or can be converted to) a valid numeric value.

**Parameters:**

param (variant)

**Return value:**

boolean: If param appears to be numeric, the return value is 1, otherwise 0

**Example:**

```
Function: ISNUMERIC('abc')  
Output: 0  
  
Function: ISNUMERIC('123')
```

Output: 1

Function: ISNUMERIC('123abc')

Output: 0

### 1.4.15 CONVERTPHONENUMBER

**Format:** CONVERTPHONENUMBER(*string* phone\_nr, *integer* country\_dial\_prefix, *integer* maxshortcodelength).

**Use:** Normalizes a phone number to the international format if possible.

If the phone number doesn't contain the country dial prefix, the provided country\_dial\_prefix parameter will be used. Shortcodes, shorter than the specified shortcodelength will not be..

**Parameters:**  
normalized

**Return value:**  
string: Converted phone number

**Example:**

Function: CONVERTPHONENUMBER('+32 477 112345',32,11,4)

Output: +32477112345

Function: CONVERTPHONENUMBER('0032 477 112345',32,11,4)

Output: +32477112345

Function: CONVERTPHONENUMBER('0477 112345',32,11,4)

Output: +32477112345

### 1.4.16 UTF8

**Format:** UTF8( *string* value )

**Use:** Converts the supplied value to UTF8.

**Parameters:**

Value (string): string to convert to UTF8

**Return value:**

string: Converted value

**Example:**

```
Function: UTF8('Bàrt')  
Output:   bÃ rt
```

### 1.4.17 UTF8DECODE

**Format:** UTF8DECODE( *string* value, *string* charset )

**Use:** Converts the supplied UTF8-value to the provided charset.

**Parameters:**

Value (string): UTF8-String to convert to UTF8

charset (string): the charset to convert the value to

**Return value:**

string: Converted value

**Example:**

```
Function: UTF8DECODE(UTF8('bàèèrt'),'iso-8859-1')  
Output:   bàèèrt
```

### 1.4.18 CONVERTCHARSET

**Format:** CONVERTCHARSET( *string* value, *string* charset1, *string* charset2 )

**Use:** Converts the supplied value from the provided charset to the second provided charset.

**Parameters:**

Value (string): UTF8-String to convert to UTF8

charset1 (string): the charset to convert the value to

**Return value:**

string: Converted value

**Example:**

```
Function: CONVERTCHARSET('bàrt','iso-8859-1','utf-8')
Output:   bÃ rt
```

### 1.4.19 MDENCODE

**Format:** MDENCODE( *string* value )

**Use:** Returns the MD5-encoded value of the provided value.

**Parameters:**

Value (string): String to be encoded

**Return value:**

string: Converted value

**Example:**

```
Function: MDENCODE('abcdefgh')
Output:   E8DC4081B13434B45189A720B77B6818
```

### 1.4.20 MDENCODE\_W

**Format:** MDENCODE\_W( *string* value )

**Use:** Returns the MD5-encoded value after a conversion to UTF-8 of the provided value

**Parameters:**

Value (string): string to be encoded

**Return value:**

String: encoded value

**Example:**

```
Function: MDENCODE_W(MAIL) where MAIL=Ben.demoree@selligent.com
Output:   3000DA4541BEAD6FFB5E548A425DE7A2
```

### 1.4.21 GETCAMPAIGNID

**Format:** GETCAMPAIGNID(*string* hashcode)

**Use:** Returns the ID of the campaign the component is in.

**Parameters:**  
hashcode (string): hashcode to decode the ID from

**Return value:**  
string: Current CampaignID

**Example:**

Function:	GETCAMPAIGNID(@ID)
Output:	1

### 1.4.22 GETACTIONID

**Format:** GETACTIONID(*string* hashcode)

**Use:** Returns the ID of the active component in the current campaign.

**Parameters:**  
hashcode (string): hashcode to decode the ID from

**Return value:**  
string: Current ActionID

**Example:**

Function:	GETACTIONID(@ID)
Output:	4

### 1.4.23 GETLISTID

**Format:** GETLISTID(*string* hashcode)

**Use:** Returns the ID of the list the current campaign is working on.

**Parameters:**  
hashcode (string): hashcode to decode the ID from

**Return value:**

string: Current ListID

**Example:**

Function:	GETLISTID(@ID)
Output:	12

### 1.4.24 GETUSERID

**Format:** GETUSERID(*string* hashcode)

**Use:** Returns the ID of the current user.

**Parameters:**

hashcode (string): hashcode to decode the ID from

**Return value:**

string: Current UserID

**Example:**

Function:	GETUSERID(@ID)
Output:	27

### 1.4.25 GETPROBEID

**Format:** GETPROBEID(*string* hashcode)

**Use:** Returns the ID of the clicked sensor.

**Parameters:**

hashcode (string): hashcode to decode the ID from

**Return value:**

string: Current ProbeID

**Example:**

Function:	GETPROBEID(@ID)
Output:	100

### 1.4.26 GETTRIGGERID

**Format:** GETTRIGGERID(*string* hashcode)

**Use:** Returns the ID of the trigger that initiated the execution of the campaign-flow.

**Parameters:**

hashcode (string): hashcode to decode the ID from

**Return value:**

string: Current TriggerID

**Example:**

Function: GETTRIGGERID(@ID)

Output: 0

### 1.4.27 GETCATALOGLISTID

**Format:** GETCATALOGLISTID(*string* hashcode)

**Use:** Returns the ID of the article list that contained the link that initiated the current step.

**Parameters:**

hashcode (string): hashcode to decode the ID from

**Return value:**

string: Current CatalogListID

**Example:**

Function: GETCATALOGLISTID(@ID)

Output: 344

### 1.4.28 GETCATALOGITEMID

**Format:** GETCATALOGITEMID(*string* hashcode)

**Use:** Returns the ID of the article that contained the link that initiated the current step.

**Parameters:**

hashcode (string): hashcode to decode the ID from

**Return value:**

string: Current CatalogItemID

**Example:**

Function:	GETCATALOGITEMID(@ID)
Output:	17

### 1.4.29 CHKBANKACCOUNT

**Format:** CHKBANKACCOUNT( *string* accountnumber, *string* countrycode )

**Use:** Checks the format of an account number.

BE Checks if the length of the accountnumber is 12, performs a modulo-check (%97) and checks the checksum-digits.

NL Checks if the length is less than 11.  
In case the length is less than 8, the accountnumber is accepted as 'GIRO'number.

If the length equals 9 or 10, a modulo-check (%11) is performed and checked with the checksum-digits.

**Parameters:**

Accountnumber (string): the account number to be checked

Countrycode (string): the ISO- country code. Possible values are BE and NL

**Return value:**

integer:

**Example:**

Function:	CHKBANKACCOUNT('1234', 'NL')
Output:	1 (valid - Giro)
Function:	CHKBANKACCOUNT('12345678912', 'NL')
Output:	0 (invalid)
Function:	CHKBANKACCOUNT('000-0000011-11', 'BE')
Output:	1 (valid )

### 1.4.30 CHKIBAN (NEW for 6.3.4)

**Format:** CHKIBAN(*string* accountnumber)

**Use:** Checks if an account number is a valid IBAN number

**Parameters:**

Accountnumber (string): the account number to be checked

**Return value:**

1: valid or 0: not valid

**Example:**

Function:     CHKIBAN('BE6853900754034')

Output:        0

### 1.4.31 GENERATEPWD

**Format:** GENERATEPWD(*int* length )

**Use:** Returns a strong password of the desired length.  
Minimum length is 7; if a length smaller than 7 is specified, the function will default to 7.

**Parameters:**

length (int): the length of the password to generate

**Return value:**

integer: indicating true or false

**Example:**

Function:     GENERATEPWD(1)

Output:        qB1Ps!K

  

Function:     GENERATEPWD(10)

Output:        4hNNMD?t9g

### 1.4.32 CHKREGEX

**Format:** CHKREGEX (*string* RegularExpression , *string* fieldname )

**Use:** Validates a value with Regular Expression.

**Parameters:**

RegularExpression (string): the regular expression to compare with

Fieldname (string): the variable to be validated

**Return value:**

integer: true or false

**Example:**

```

Function:   CHKREGEX('^([0-9a-zA-Z][-\w]*[0-9a-zA-Z])*@[([0-9a-zA-Z])+(-\w)*[0-9a-zA-Z])*\.[a-zA-Z]{2,9})$', MAIL)
Output:    1 (valid)

Function:   CHKREGEX('^([0-9a-zA-Z][-\w]*[0-9a-zA-Z])*@[([0-9a-zA-Z])+(-\w)*[0-9a-zA-Z])*\.[a-zA-Z]{2,9})$', @MAIL)
Output:    1 (valid)

Function:   CHKREGEX('^([0-9a-zA-Z][-\w]*[0-9a-zA-Z])*@[([0-9a-zA-Z])+(-\w)*[0-9a-zA-Z])*\.[a-zA-Z]{2,9})$', NAME)
Output:    0 (invalid)

```

### 1.4.33 GENERATEGUID

**Format:** GENERATEGUID( )

**Use:** Validates a unique string.

**Parameters:**

None

**Return value:**

string: Unique ID

**Example:**

```

Function:   GENERATEGUID()
Output:    956e45d6443c4e3617ee64

```

### 1.4.34 WORDWRAP

**Format:** WORDWRAP(*int* LineLength , *string* Text , *int* TabLength)

**Use:** returns wrapped text.

**Parameters:**

LineLength: the maximum length of a line of text

Text: the text that needs to be wrapped

TabLength: number of spaces a tab takes

**Return value:**

string: wrapped text

**Note: this function only works correctly in the text version of the message.**

### 1.4.35 STRIPHTML

**Format:** STRIPHTML(*string* HTML , *string* IncludeTags , *string* ExcludeTags)

**Use:** returns an html in which some tags have been removed. Typically, this function replaces BR, P, tags by a linefeed or LI tags are replaced by lists.

**Parameters:**

Html: the html to parse

IncludeTags: the list of tags to strip/remove. If multiple tags they are pipe separated

ExcludeTags: the list of tags that cannot be stripped/removed. If multiple tags they are pipe separated.

**Return value:**

string: stripped HTML

**Example:**

```
Var Strip1='<p>hello <strong>World</strong><p><p>This is an example</p>'
```

```
STRIPHTML(Strip1)
```

```
Hello world
```

```
This is an example
```

```
Var Strip1='<p>hello <strong>World</strong><p><p>This is an example</p>', ", 'strong'
```

```
STRIPHTML(Strip1)
```

Hello <strong>world</strong>

This is an example

```
Var Strip1='<ul><li>item 1</li><li>item 2</li><li>item 3</li></ul>'
```

```
STRIPHTML(Strip1)
```

```
- item 1
```

```
- item 2
```

```
- item 3
```

### 1.4.36 SHAENCODE

**Format:** SHAENCODE(SHAVersion, toEncode)

**Use:** encodes a string in SHA-version number

**Parameters:**

SHAVersion: the encoding to be applied. Possible options are 1, 224, 256, 384 and 512. Any other version will result in an empty string

toEncode: the string to encode

**Return value:** string: encoded string

### 1.4.37 BASE64ENCODE

**Format:** BASE64ENCODE(toEncode)

**Use:** encodes a string in BASE64

**Parameters:**

toEncode: the string to encode

**Return value:** string: encoded string

### 1.4.38 BASE64DECODE

**Format:** BASE64DECODE(toDecode)

**Use:** decodes a BASE64 to a string

**Parameters:**

toDecode: the encoded string to decode

**Return value:** string: decoded string

### 1.4.39 TOBOOL

**Format:** TOBOOL( *var*).

**Use:** converts the value to a boolean (1 or 0).

**Parameters:**

var to convert

**Return value:**

A boolean

### 1.4.40 TOINT

**Format:** TOINT( *var*).

**Use:** converts the value to an integer

**Parameters:**

var to convert

**Return value:**

An integer

### 1.4.41 TOFLOAT

**Format:** TOFLOAT( *var*).

**Use:** converts the value to a float

**Parameters:**

var to convert

**Return value:**

A float

### 1.4.42 TODATE

**Format:** TODATE( *var* ).

**Use:** converts the value to a date.

**Parameters:**

var to convert

**Return value:**

A date

### 1.4.43 TODATETIME

**Format:** TODATETIME( *ar* ).

**Use:** converts the value to a datetime.

**Parameters:**

var to convert

**Return value:**

A datetime

### 1.4.44 TOSTRING

**Format:** TOSTRING(*var*).

**Use:** converts the value to a string

**Parameters:**

var to convert

**Return value:**

A string

## 1.4.45 LOCALIZE

**Format:** LOCALIZE(var,locale)

**Use:** use this function to localize a field (eg. Date)

**Parameters:**

Var representing the field to localize

Local: the local to which the variable should be localized

**Return value:** depends on the settings of the system.

## 1.5 Template functions

### 1.5.1 Overview

[COUNT/ARTICLE\\_COUNT](#)

[ARTICLE\\_PROPERTY](#)

[CONVERT](#)

### 1.5.2 COUNT/ARTICLE\_COUNT

**Format:** COUNT( *string* ArticleContainerName [ \ *string* FilterName ] )  
 ARTICLE\_COUNT( *string* ArticleContainerName [ \ *string* FilterName ] )

**Use:** Returns the number of articles in the article-container or article-container-list.

**Parameters:**

ArticleContainerName (string): name of the article container

FilterName (string): Name of the filter on the article container

**Return value:**

string: the number of articles in the container

**Example:**

Function:	COUNT('ARTICLES') COUNT('ARTICLES\TOC')
Output:	5

### 1.5.3 ARTICLE\_PROPERTY

**Format:** ARTICLE\_PROPERTY( string ArticleContainerName [ \ string *FilterName* ],  
 int ArticleIndex, string FieldName )

**Use:** Returns the content of the *FieldName* from a specific article (*ArticleIndex*) in a specific article container (*ArticleContainerName*).

**Parameters:**

- ArticleContainerName (string): name of the article container
- FilterName (string): Name of the filter on the article container
- ArticleIndex (int): ID of the article container
- Fieldname (string): Name of the field to get the content from

**Return value:**

string: the content retrieved from the article field

**Example:**

Function:	ARTICLE_PROPERTY('ARTICLES\TOC',1, 'Title')
Output:	I love cats

## 1.5.4 CONVERT

**Format:** CONVERT ('datetime', *string* value, *int* format )

**Use:** Converts provided value to type datetime

**Parameters:**

value (string): string to be converted to date

format (integer): format to convert the date to. This value will always be 120

**Return value:**

string: returns the converted datetime

**Example:**

Function:      CONVERT('datetime', '2009-06-13', 120 )

Output:        2009-06-13 00:00:00