

SQL Functions Used in EPIDesigner Expressions

Database: **SQL Server 2000**

When building expressions with EPIDesigner (version 6.x) using an ODBC connection to a SQLServer 2000 database, please refer to this document or your SQLServer 2000 documentation.

Operators

+	Concatenation
'	Text delimiter
+	Addition
-	Subtraction

String Functions

ASCII(char)	Returns the ASCII (0-255) value of the first character in the string "str". Example: ASC('ascii') returns 97 (ASCII value for 'a').
CHAR(number)	Returns the character for which the ASCII code is "number". Example: CHR(10) returns a line feed.
CHARINDEX(ch1, ch2)	Returns the starting position of "ch1" in "ch2". Example: CHARINDEX('123', '9876523123987567') will return 8.
DATALENGTH (char)	Returns the length of string "char". Example: DATALENGTH('0987654') will return 7.
LEFT(str,n)	Return the first "n" characters of "str". Example: LEFT ('Mary',1) will return 'M'.
LOWER(str)	Returns the string "str" with all characters converted to lower case. Example: LOWER('Mary') will return 'mary'.
LTRIM(str)	Removes leading blanks in "str". Example: LTRIM(' Mary') will return 'Mary'.
RIGHT(char,n)	Returns a sub-string of "char" starting at the "n" th characters from the right. Example: RIGHT('1234500',3) will return '500'.
RTRIM(str)	Removes trailing spaces in "str". Example: RTRIM('Mary ') will return 'Mary'.
SUBSTRING(str, m, n)	Returns a sub-string of "str", beginning at character "m", "n" characters long. Example: SUBSTR('00012345',4,3) will return '123'.
UPPER(str)	Converts the characters of "str" to upper case. Example: UPPER('Mary') will return 'MARY'.

Numeric Functions

CEILING (num)	Returns the smallest integer greater than or equal to "n". Example:
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CEILING(99.8) returns 100.

FLOOR(n) Returns the largest integer equal to or less than "n". Example: FLOOR(99.8) returns 99.

ROUND(n, m) or ROUND(n) Returns "n" rounded to "m" decimal places; "m" defaults to 0. Example: ROUND(99.8) returns 100.

Date and Time Functions

DATEADD (datepart, n, d) Returns a date that is "d" plus "n" times "datepart". Example: DATEADD('mm', 6, Creation_Date) will return a date that is 6 months later than the value stored in the field Creation_Date.

DATEDIFF (datepart, d, e) Returns a signed integer value equal to the number of "datepart" boundaries crossed between "e" and "d". Example: DATEDIFF('yy', Date_Hired, GETDATE()) will return the number of years past since the employee was hired.

DATENAME (datepart, d) Returns a character string representing the specified "datepart" of "d".

DATEPART (datepart, d) Returns an integer representing the specified "datepart" of "d".

GETDATE() Returns the current system date and time.

Date Parts

Date part	Abbreviation	Values
year	yy	1753-9999
quarter	qq	1-4
month	mm	1-12 (Jan-Dec)
day of year	dy	1-366
day	dd	1-31
week	wk	1-53
weekday	dw	1-7 (Sun-Sat)

Conversion Functions

CONVERT (dt, sd) or CONVERT(dt(n),sd) or CONVERT(dt, sd,style) Converts the source data "sd" into an expression of the specified data type (dt or dt(n)). An optional style could be specified when converting dates.

Date Styles

Style without century (yy)	Style with century (yyyy)	Standard	Output
-	0 or 100 (*)	Default	mon dd yyyy hh:miAM (or PM)
1	101	USA	mm/dd/yy

2	102	ANSI	yy.mm.dd
3	103	British/French	dd/mm/yy
4	104	German	dd.mm.yy
5	105	Italian	dd-mm-yy
6	106	-	dd mon yy
7	107	-	mon dd, yy
8	108	-	hh:mm:ss
-	9 or 109(*)	Default + ms	mon dd yyyy hh:mi:ss:mmmAM (or PM)
10	110	USA	mm-dd-yy
11	111	JAPAN	yy/mm/dd
12	112	ISO	yymmdd
13	13 or 113 (*)	Eur. def.t + ms	dd mon yyyy hh:mm:ss:mmm(24h)
14	114		hh:mi:ss:mmm(24h)

* The default values (style 0 or 100, 9 or 109, and 13 or 113) always return the century (yyyy).