**QL SERVER: CHARINDEX FUNCTION**

This SQL Server tutorial explains how to use the **CHARINDEX function** in SQL Server (Transact-SQL) with syntax and examples.

**DESCRIPTION**

The SQL Server (Transact-SQL) CHARINDEX functions returns the location of a substring in a string. The search is NOT case-sensitive.

**SYNTAX**

The syntax for the CHARINDEX function in SQL Server (Transact-SQL) is:

CHARINDEX( substring, string, [start\_position] )

Parameters or Arguments

**substring**

The substring that you want to find.

**string**

The string to search within.

**start\_position**

Optional. The position in *string* where the search will start. The first position is 1.

**NOTE**

* The first position in *string* is 1.
* If the *substring* is not found in *string*, the CHARINDEX function will return 0.

**APPLIES TO**

The CHARINDEX function can be used in the following versions of SQL Server (Transact-SQL):

* SQL Server 2014, SQL Server 2012, SQL Server 2008 R2, SQL Server 2008, SQL Server 2005

**EXAMPLE**

Let's look at some SQL Server CHARINDEX function examples and explore how to use the CHARINDEX function in SQL Server (Transact-SQL).

For example:

SELECT CHARINDEX('t', 'TechOnTheNet.com');

*Result:* 1 *(search is not case-sensitive so it will match on 'T')*

SELECT CHARINDEX('t', 'TechOnTheNet.com', 2);

*Result:* 7

SELECT CHARINDEX('t', 'TechOnTheNet.com', 8);

*Result:* 12

SELECT CHARINDEX('ON', 'TechOnTheNet.com');

*Result:* 5 *(search is not case-sensitive so it will match on 'On')*

SELECT CHARINDEX('z', 'TechOnTheNet.com');

*Result:* 0

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The CHARINDEX string function returns the starting position of the specified expression in a character string.  It accepts three parameters with the third parameter being optional.

CHARINDEX ( expression1, expression2, [ , start\_location ] )

The first parameter is the expression that contains the sequence of characters to be found.  The second parameter is the expression searched for the specified sequence.  This is typically a column from a table.  The third parameter, which is optional, is the character position to start searching expression1 in expression2.

SELECT CHARINDEX('the', 'the quick brown fox jumps over the lazy dog') AS [Location]  
  
Location  
----------------  
1

SELECT CHARINDEX('the', 'the quick brown fox jumps over the lazy dog', 10) AS [Location]  
  
Location  
----------------  
32

SELECT CHARINDEX('jumped', 'the quick brown fox jumps over the lazy dog') AS [Location]  
  
Location  
----------------  
0

One useful use of the CHARINDEX is in getting the first name and last name from a full name:

DECLARE @FullName  VARCHAR(100)  
SET @FullName = 'Mickey Mouse'  
SELECT LEFT(@FullName, CHARINDEX(' ', @FullName) - 1) AS [FirstName],   
 RIGHT(@FullName, CHARINDEX(' ', REVERSE(@FullName)) - 1) AS [LastName]  
  
First Name Last Name  
---------- ----------  
Mickey Mouse

The CHARINDEX function can also be used to extract the website from a full URL:

DECLARE @URL   VARCHAR(100)  
SET @URL = 'http://www.sql-server-helper.com/tips/tip-of-the-day.aspx'  
SELECT SUBSTRING(@URL, CHARINDEX('http://', @URL) + 7, CHARINDEX('/', @URL, 8) - 8) AS [Website]  
  
Website  
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www.sql-server-helper.com

Another use of the CHARINDEX string function, which is not too obvious, is in sorting a result set.  Let’s assume you have a table which contains a U.S. State Code and instead of sorting the result alphabetically based on the U.S. State Code you want it sorted by certain states, like CA, FL, TX, NY in that order.  This can be accomplished using the CHARINDEX string function:

SELECT \*  
FROM [dbo].[Customers]  
ORDER BY CHARINDEX([State], 'CA-FL-TX-NY')