

**NAME**

libexslt - extension library for XSLT

**SYNOPSIS**

```
#include <libexslt/exslt.h>
```

```
void exsltCommonRegister(void);  
void exsltDateRegister(void);  
void exsltDynRegister(void);  
void exsltFuncRegister(void);  
void exsltMathRegister(void);  
void exsltSetsRegister(void);  
void exsltStrRegister(void);  
void exsltRegisterAll(void);  
void exsltSaxonRegister(void);
```

**DESCRIPTION**

The **libexslt** library is used to provide extensions to XSLT functions. These extensions come from the EXSLT project <<http://www.exslt.org/>>

**USAGE**

To make use of these functions in XSLT the appropriate namespace must be defined on the **xsl:stylesheet** element. To enable support for them in **libexslt(3)** you must call the appropriate functions (listed in the **SYNOPSIS** section) to register the extensions. The *xslt-config* shell script can be used to obtain the necessary flags for the pre-processor and linker. The supported extensions are:

**COMMON**

Namespace: <http://exslt.org/common>

See <http://www.exslt.org/exsl/index.html> for a description.

<b>node-set()</b>	convert the given RTF into a node-set.
<b>object-type()</b>	returns the type of the given argument.
<b>document</b>	Create multiple output documents. See <a href="http://www.exslt.org/exsl/elements/document/index.html">http://www.exslt.org/exsl/elements/document/index.html</a>

**MATH**

Namespace: <http://exslt.org/math>

See <http://www.exslt.org/math/index.html> for a description.

<b>min()</b>	returns the minimum value of the given node-set
<b>max()</b>	returns the maximum value of the given node-set
<b>highest()</b>	returns the nodes in the node-set whose value is the maximum value for the node-set.
<b>lowest()</b>	returns the nodes in the node-set whose value is the minimum value for the node-set.
<b>constant()</b>	returns a number value of the given constant with the given precision. The constants are PI, E, SQRRT2, LN2, LN10, LOG2E, and SQRRT1_2.
<b>random()</b>	returns a random number between 0 and 1 inclusive.
<b>abs()</b>	returns the absolute value of the argument.
<b>sqrt()</b>	returns the square root of the argument.
<b>power()</b>	returns the power base and power arguments.
<b>log()</b>	returns the natural log of the argument.
<b>sin()</b>	returns the sine of the argument.
<b>cos()</b>	returns the cosine of the argument.
<b>tan()</b>	returns the tangent of the argument.
<b>asin()</b>	returns the arc sine of the argument.
<b>acos()</b>	returns the arc cosine of the argument.
<b>atan()</b>	returns the arc tangent of the argument.

**atan2()** returns the arc tangent function of the y/x arguments.

**exp()** returns the exponential function of the argument.

## SETS

Namespace: <http://exslt.org/sets>

See <http://www.exslt.org/set/index.html> for a description.

**difference()** returns the difference between the two given node-sets.

**intersection()** returns a node-set of the nodes within both given node-sets.

**distinct()** returns a node-set of all nodes in the first argument that are not in the seconds argument.

**has-same-node()** returns TRUE if there is an intersection between the two given node-sets.

**leading()** returns a node-set of all nodes in the first argument that precede the first node in the second argument.

**trailing()** returns a node-set of all nodes in the first argument that follow the first node in the second argument.

## DATES and TIMES

Namespace: <http://exslt.org/dates-and-times>

See <http://www.exslt.org/date/date.html> for a description.

**date-time()** returns the current date and time as a date/time string.

**date()** returns the date specified in the given date/time string.

**time()** returns the time specified in the date/time string given as the argument.

**year()** returns the year of a date as a number.

<b>leap-year()</b>	returns true if the year given in a date is a leap year.
<b>month-in-year()</b>	returns the month of a date as a number.
<b>month-name()</b>	returns the full name of the month of a date.
<b>month-abbreviation()</b>	returns the abbreviation of the month of a date.
<b>week-in-year()</b>	returns the week of the year as a number.
<b>week-in-month()</b>	returns the week in a month of a date as a number.
<b>day-in-year()</b>	returns the month of a date as a number.
<b>day-in-month()</b>	returns the day of a date as a number.
<b>day-of-week-in-month()</b>	returns the day-of-the-week in a month of a date as a number.
<b>day-in-week()</b>	returns the day of the week given in a date as a number.
<b>day-name()</b>	returns the full name of the day of the week of a date.
<b>day-abbreviation()</b>	returns the abbreviation of the day of the week of a date.
<b>hour-in-day()</b>	returns the hour of the day as a number.
<b>minute-in-hour()</b>	returns the minute of the hour as a number.
<b>second-in-minute()</b>	returns the second of the minute as a number.
<b>seconds()</b>	returns the number of seconds specified by the argument string.
<b>add()</b>	returns the date/time resulting from adding a duration to a date/time.
<b>add-duration()</b>	returns the duration resulting from adding two given durations together.
<b>difference()</b>	returns the duration between the first date and the second date.

**duration()** returns a duration string that represents the given number of seconds since 1970-01-01T00:00:00.

## STRINGS

Namespace: <http://exslt.org/strings>

See <http://www.exslt.org/str/index.html> for a description.

**tokenize()** returns a node set of token elements, each containing one token from the string.

**padding()** returns a string padded to a certain length.

**align()** returns a string aligned within another string.

**concat()** returns the concatenation of the string values of the nodes in that node set.

## FUNCTIONS

Namespace: <http://exslt.org/functions>

See <http://www.exslt.org/func/index.html> for a description.

**function** declares an extension function.

**result** returns the result of an extension function declared in `function()`.

## FILES

*/usr/bin/xslt-config*

shell script giving pre-processor and linker flags.

*/usr/lib/libexslt.a*

static library

*/usr/lib/libexslt.so*

sharable library

## AUTHORS

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**SEE ALSO**

**libxml(3)**, **libxslt(3)**, **xmllint(1)** **xsltproc(1)**,