

# *API User Manual*

## *For*

# **FCTRFTXT.DLL**

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# ***Table of Contents***

<b>INITIALIZATION FUNCTIONS .....</b>	<b>1</b>
FCTR_REGISTER.....	1
<b>TEXT FORMATTING FUNCTIONS .....</b>	<b>2</b>
FCTR_FORMATTEXT .....	2
FCTR_RAWTEXT.....	5
<b>DATE AND TIME MATH FUNCTIONS.....</b>	<b>6</b>
FCTR_DECREMENTMINUTE .....	6
FCTR_INCREMENTMINUTE .....	6
FCTR_DECREMENTDAY.....	6
FCTR_INCREMENTDAY.....	6
<b>DATE INFORMATIONAL FUNCTIONS .....</b>	<b>7</b>
FCTR_WEEKDAYFROMDATE .....	7
FCTR_YEARFROMDATE .....	8
FCTR_MONTHFROMDATE .....	9
FCTR_DAYFROMDATE .....	10
FCTR_DAYSINTOYEARFROMDATE .....	11
<b>TIME INFORMATIONAL FUNCTIONS.....</b>	<b>12</b>
FCTR_HOURFROMTIME .....	12
FCTR_MINUTEFROMTIME .....	13
FCTR_SECONDFROMTIME .....	14
<b>C++.....</b>	<b>15</b>
INITIALIZATION CONSTANTS .....	15
RETURN CODE CONSTANTS .....	16
<b>VISUAL BASIC.....</b>	<b>17</b>
INITIALIZATION CONSTANTS .....	17
RETURN CODE CONSTANTS .....	18
DECLARES .....	19

# Initialization Functions

## **FCTR\_Register**

The **FCTR\_Register** function initializes the DLL with your registration code and unlocks the full functionality.

```
LONG FCTR_Register (
    LPCSTR lpszName,           // Registered username
    LPCSTR lpszRegCode         // Registration code
);
```

### Parameters

*lpszName*

Registered username.

*lpszRegCode*

Registration code.

### Return Values

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If this function fails, the return value is less than zero.

### Remarks

This function should be the first function called BEFORE any of the other calls. Please note that for EACH executable you will need a new registration code.

**WARNING:** Calls to this function without the proper registration code will shutdown your machine.

# Text Formatting Functions

## FCTR\_FormatText

The FCTR\_FormatText function formats a text string in a specific style.

### LONG FCTR\_FormatText(

```
LPSTR lpBuffer,           // Pointer to a buffer containing the text to be formatted, and returns the formatted text
LONG MaxSize,            // Maximum size of lpBuffer
LONG Style               // Style to format the text
);
```

### Parameters

#### *lpBuffer*

Pointer to a buffer containing the text to be formatted, and returns the formatted text.

#### *MaxSize*

Maximum size of *lpBuffer*.

#### *Style*

Style	Description
FCTR_STYLE_FREEFORM	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li></ul>
Andrew	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li><li>• Allows only one word</li><li>• Capitalizes first letter of each word</li></ul>
Burns	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li><li>• Capitalizes first letter of each word</li><li>• Will handle Sr., Jr., I, II, III...XX</li></ul>
From Concept To Reality, L.L.C.	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li><li>• Capitalizes first letter of each word</li></ul>
263 Black River Road	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li><li>• Capitalizes first letter of each word</li><li>• Will handle (and expand) Ct, Rd, St, Ln, Wy, Pl, Pz, Plz, Dr, Drv, Av, Ave, Cir, Tp, Tpk, Tpke, Bv, Blv, Blvd, Ste, Rt, Rte, POB, PO, RR, APO</li></ul>
Long Valley	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li><li>• Strips all non-letter characters</li><li>• Capitalizes first letter of each word</li></ul>
NJ	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li><li>• Strips all non-letter characters</li><li>• Truncates string to two characters</li><li>• Capitalizes both letters</li></ul>
00000	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li><li>• Strips all non-numeric characters</li><li>• Truncates string to five characters</li><li>• Adds leading zeros, if necessary</li></ul>
00000 00000-0000	<ul style="list-style-type: none"><li>• Strips all excess spaces from the front and end of the string</li><li>• Strips all non-numeric characters</li><li>• Truncates string to five characters (ZIP) or ten characters (ZIP+4)</li><li>• Adds leading zeros and hyphen, if necessary</li></ul>

FCTR_STYLE_PHONE  000-0000 (000) 000-0000 (000) 000-0000 x#####0	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Strips all non-numeric characters</li> <li>Truncates string to eight characters (seven digits), fourteen characters (ten digits), or more than sixteen characters (ten digits plus up to ten more digits for extension)</li> <li>Adds leading zeros, hyphen, and extension character, if necessary</li> </ul>
FCTR_STYLE_EMAIL  fctr@nac.net	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Adds @, if missing</li> </ul>
FCTR_STYLE_URL  http://users.nac.net/fctr	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Adds ftp://, https://, or http://, if missing</li> </ul>
FCTR_STYLE_SSN  000-00-0000	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Strips all non-numeric characters</li> <li>Truncates string to eleven characters</li> <li>Adds leading zeros and hyphens, if necessary</li> </ul>
FCTR_STYLE MONEY  \$###,##0.00 \$42.00 \$1,237.33	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Strips all non-numeric characters</li> <li>Truncates string to two decimal places</li> <li>Adds leading \$, commas, and decimal point, if necessary</li> </ul>
FCTR_STYLE_TIME24HR  hh:mm	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Truncates string to a maximum of five characters</li> <li>Adds colon, if necessary</li> </ul>
FCTR_STYLE_TIMEAMPM  h:mm AM h:mm PM	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Truncates string to a maximum of eight characters</li> <li>Adds colon and AM or PM, if necessary</li> </ul>
FCTR_STYLE_TIMEampm  h:mm am h:mm pm	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Truncates string to a maximum of eight characters</li> <li>Adds colon and am or pm, if necessary</li> </ul>
FCTR_STYLE_TIMEAP  h:mmA h:mmP	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Truncates string to a maximum of six characters</li> <li>Adds colon and A or P, if necessary</li> </ul>
FCTR_STYLE_TIMEap  h:mmA h:mmP	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Truncates string to a maximum of six characters</li> <li>Adds colon and a or p, if necessary</li> </ul>
FCTR_STYLE_DATEMIL  dd MMM yyyy 4 OCT 1998 23 APR 2001	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Truncates string to a maximum of eleven characters</li> <li>Month is in all capitals</li> </ul>
FCTR_STYLE_DATEMDY  m/d/yyyy 10/4/1998 4/23/2001	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Truncates string to a maximum of ten characters</li> <li>Adds / as necessary</li> </ul>
FCTR_STYLE_DATEMDY  mmm. d, yyyy Oct. 4, 1998 Apr. 23, 2001	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Truncates string to a maximum of thirteen characters</li> <li>Three character abbreviation of month</li> <li>Adds , as necessary</li> <li>mmm. d, yyyy</li> </ul>
FCTR_STYLE_DATEMMMDY  mmmm d, yyyy October 4, 1998 April 23, 2001	<ul style="list-style-type: none"> <li>Strips all excess spaces from the front and end of the string</li> <li>Month spelled out in full</li> <li>Adds , as necessary</li> </ul>

## Return Values

If this function succeeds, the return value is the length of the formatted string placed in *lpBuffer* without the NULL terminator.

If this function fails, the return value is less than zero.

## **Remarks**

This function is used to format text in a specific style.

## **FCTR\_RawText**

The **FCTR\_RawText** function returns a text string without any formatting in a specific style.

```
LONG FCTR_RawText(  
    LPSTR lpBuffer,           // Pointer to a buffer containing the text to be stripped, and returns the raw text  
    LONG MaxSize,            // Maximum size of lpBuffer  
    LONG Style               // Style to format the text  
)
```

### **Parameters**

*lpBuffer*

Pointer to a buffer containing the text to be stripped, and returns the raw text.

*MaxSize*

Maximum size of *lpBuffer*.

*Style*

Style to format the text. Please refer to the **FCTR\_FormatText** function for a detailed explanation of this parameter.

### **Return Values**

If this function succeeds, the return value is the length of the raw string placed in *lpBuffer* without the NULL terminator.

If this function fails, the return value is less than zero.

### **Remarks**

This function is used to retrieve raw text in a specific style without formatting. This is useful for telephone numbers and social security numbers.

# Date and Time Math Functions

**FCTR\_DecrementMinute**

**FCTR\_IncrementMinute**

**FCTR\_DecrementDay**

**FCTR\_IncrementDay**

These functions return the formatted date or time after doing the appropriate math.

```
LONG FCTR_DecrementMinute(  
LONG FCTR_IncrementMinute(  
LONG FCTR_DecrementDay(  
LONG FCTR_IncrementDay(  
    LPSTR lpBuffer,           // Pointer to a buffer containing the text to be formatted, and returns the formatted text  
    LONG MaxSize,            // Maximum size of lpBuffer  
    LONG Style               // Style to format the text  
);
```

## Parameters

*lpBuffer*

Pointer to a buffer containing the text to be formatted, and returns the formatted text.

*MaxSize*

Maximum size of *lpBuffer*.

*Style*

Style to format the text. Please refer to the **FCTR\_FormatText** function for a detailed explanation of this parameter.

## Return Values

If this function succeeds, the return value is the length of the formatted string placed in *lpBuffer* without the NULL terminator.

If this function fails, the return value is less than zero.

# Date Informational Functions

## **FCTR\_WeekdayFromDate**

The **FCTR\_WeekdayFromDate** function returns the day of the week from an unformatted string.

```
LONG FCTR_WeekdayFromDate(  
    LPCSTR lpBuffer,           // Pointer to a buffer containing the text  
    LPLONG lpDay              // Pointer to a variable to receive the day value  
)
```

### Parameters

*lpBuffer*

Pointer to a buffer containing the text.

*lpDay*

Pointer to a variable to receive the day value. (0-6)

### Return Values

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If the function fails, the return value is less than zero.

### Remarks

This function returns the day of the week from an unformatted text string.

## **FCTR\_YearFromDate**

The **FCTR\_YearFromDate** function returns the year from an unformatted string.

```
LONG FCTR_YearFromDate(  
    LPCSTR lpBuffer,           // Pointer to a buffer containing the text  
    LPLONG lpYear             // Pointer to a variable to receive the year value  
);
```

### **Parameters**

*lpBuffer*

Pointer to a buffer containing the text.

*lpYear*

Pointer to a variable to receive the year value. (Year with century)

### **Return Values**

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If the function fails, the return value is less than zero.

### **Remarks**

This function returns the year from an unformatted text string.

## **FCTR\_MonthFromDate**

The **FCTR\_MonthFromDate** function returns the month from an unformatted string.

```
LONG FCTR_YearFromDate(  
    LPCSTR lpBuffer,           // Pointer to a buffer containing the text  
    LPULONG lpMonth            // Pointer to a variable to receive the month value  
);
```

### **Parameters**

*lpBuffer*

Pointer to a buffer containing the text.

*lpMonth*

Pointer to a variable to receive the month value. (0-11)

### **Return Values**

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If the function fails, the return value is less than zero.

### **Remarks**

This function returns the month from an unformatted text string.

## **FCTR\_DayFromDate**

The **FCTR\_DayFromDate** function returns the day from an unformatted string.

```
LONG FCTR_DayFromDate(  
    LPCSTR lpBuffer,           // Pointer to a buffer containing the text  
    LPLONG lpDays             // Pointer to a variable to receive the day value  
);
```

### **Parameters**

*lpBuffer*

Pointer to a buffer containing the text.

*lpDays*

Pointer to a variable to receive the day value. (1-31)

### **Return Values**

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If the function fails, the return value is less than zero.

### **Remarks**

This function returns the day from an unformatted text string.

## **FCTR\_DaysIntoYearFromDate**

The **FCTR\_DaysIntoYearFromDate** function returns the number of days elapsed since Jan. 1 from an unformatted string.

```
LONG FCTR_DaysIntoYearFromDate(  
    LPCSTR lpBuffer,           // Pointer to a buffer containing the text  
    LPLONG lpDays             // Pointer to a variable to receive the days elapsed value  
);
```

### **Parameters**

*lpBuffer*

Pointer to a buffer containing the text.

*lpDays*

Pointer to a variable to receive the days elapsed value. (0-365)

### **Return Values**

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If the function fails, the return value is less than zero.

### **Remarks**

This function returns the days elapsed since Jan. 1 from an unformatted text string.

# Time Informational Functions

## **FCTR\_HourFromTime**

The **FCTR\_HourFromTime** function returns the hour from an unformatted string.

```
LONG FCTR_HourFromTime(
    LPCSTR lpBuffer,           // Pointer to a buffer containing the text
    LPLONG lpHour             // Pointer to a variable to receive the hour value
);
```

### Parameters

*lpBuffer*

Pointer to a buffer containing the text.

*lpHour*

Pointer to a variable to receive the hour value. (0-23)

### Return Values

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If the function fails, the return value is less than zero.

### Remarks

This function returns the hour from an unformatted text string.

## **FCTR\_MinuteFromTime**

The **FCTR\_MinuteFromTime** function returns the minute from an unformatted string.

```
LONG FCTR_MinuteFromTime(  
    LPCSTR lpBuffer,           // Pointer to a buffer containing the text  
    LPLONG lpMin              // Pointer to a variable to receive the minute value  
);
```

### **Parameters**

*lpBuffer*

Pointer to a buffer containing the text.

*lpMin*

Pointer to a variable to receive the minute value. (0-59)

### **Return Values**

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If the function fails, the return value is less than zero.

### **Remarks**

This function returns the minute from an unformatted text string.

## **FCTR\_SecondFromTime**

The **FCTR\_SecondFromTime** function returns the second from an unformatted string.

```
LONG FCTR_SecondFromTime(  
    LPCSTR lpBuffer,           // Pointer to a buffer containing the text  
    LPLONG lpSec              // Pointer to a variable to receive the second value  
);
```

### **Parameters**

*lpBuffer*

Pointer to a buffer containing the text.

*lpSec*

Pointer to a variable to receive the second value. (0-59)

### **Return Values**

If this function succeeds, the return value is **FCTR\_ERROR\_OK**.

If the function fails, the return value is less than zero.

### **Remarks**

This function returns the second from an unformatted text string.

# C++

## *Initialization Constants*

```
#define FCTR_STYLE_FREEFORM      (0)
#define FCTR_STYLE_FIRSTNAME     (1)
#define FCTR_STYLE_LASTNAME      (2)
#define FCTR_STYLE_BUSINESSNAME   (3)
#define FCTR_STYLE_ADDRESS        (4)
#define FCTR_STYLE_CITY           (5)
#define FCTR_STYLE_STATE          (6)
#define FCTR_STYLE_ZIPCODE        (7)
#define FCTR_STYLE_ZIPCODE4       (8)
#define FCTR_STYLE_PHONE          (9)
#define FCTR_STYLE_EMAIL          (10)
#define FCTR_STYLE_URL            (11)
#define FCTR_STYLE_SSN             (12)
#define FCTR_STYLE_MONEY          (13)
#define FCTR_STYLE_TIME24HR        (14)
#define FCTR_STYLE_TIMEAMPM       (15)
#define FCTR_STYLE_TIMEampm       (16)
#define FCTR_STYLE_TIMEap          (17)
#define FCTR_STYLE_DATEMIL         (18)
#define FCTR_STYLE_DATEMDY         (19)
#define FCTR_STYLE_DATEMDY         (20)
#define FCTR_STYLE_DATEMMMDY       (21)
#define FCTR_STYLE_DATEMMMDY       (22)
```

## ***Return Code Constants***

```
#define FCTR_ERROR_OK          (0)
#define FCTR_ERROR_INVALID_PARAMETER (-20)
#define FCTR_ERROR_NULL_POINTER   (-21)
#define FCTR_ERROR_UNREGISTERED  (-34)
```

# Visual Basic

## ***Initialization Constants***

```
Public Const FCTR_STYLE_FREEFORM = (0)
Public Const FCTR_STYLE_FIRSTNAME = (1)
Public Const FCTR_STYLE_LASTNAME = (2)
Public Const FCTR_STYLE_BUSINESSNAME = (3)
Public Const FCTR_STYLE_ADDRESS = (4)
Public Const FCTR_STYLE_CITY = (5)
Public Const FCTR_STYLE_STATE = (6)
Public Const FCTR_STYLE_ZIPCODE = (7)
Public Const FCTR_STYLE_ZIPCODE4 = (8)
Public Const FCTR_STYLE_PHONE = (9)
Public Const FCTR_STYLE_EMAIL = (10)
Public Const FCTR_STYLE_URL = (11)
Public Const FCTR_STYLE_SSN = (12)
Public Const FCTR_STYLE_MONEY = (13)
Public Const FCTR_STYLE_TIME24HR = (14)
Public Const FCTR_STYLE_TIMEAM_PM = (15) ' The _ has been added because Visual Basic is not case sensitive
Public Const FCTR_STYLE_TIMEampm = (16)
Public Const FCTR_STYLE_TIMEA_P = (17) ' The _ has been added because Visual Basic is not case sensitive
Public Const FCTR_STYLE_TIMEmap = (18)
Public Const FCTR_STYLE_DATEMIL = (19)
Public Const FCTR_STYLE_DATEMDY = (20)
Public Const FCTR_STYLE_DATEMMDY = (21)
Public Const FCTR_STYLE_DATEMMMDY = (22)
```

## ***Return Code Constants***

```
Public Const FCTR_ERROR_OK = (0)
Public Const FCTR_ERROR_INVALID_PARAMETER = (-20)
Public Const FCTR_ERROR_NULL_POINTER = (-21)
Public Const FCTR_ERROR_UNREGISTERED = (-34)
```

## Declarer

```
Public Declare Function FCTR_Register Lib "FCTRFTxt" _
    (ByVal lpszName As String, ByVal lpszRegCode As String) As Long

Public Declare Function FCTR_FormatText Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByVal MaxSize As Long, ByVal Style As Long) As Long
Public Declare Function FCTR_RawText Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByVal MaxSize As Long, ByVal Style As Long) As Long

Public Declare Function FCTR_DecrementDay Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByVal MaxSize As Long, ByVal Style As Long) As Long
Public Declare Function FCTR_IncrementDay Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByVal MaxSize As Long, ByVal Style As Long) As Long
Public Declare Function FCTR_DecrementMinute Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByVal MaxSize As Long, ByVal Style As Long) As Long
Public Declare Function FCTR_IncrementMinute Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByVal MaxSize As Long, ByVal Style As Long) As Long

Public Declare Function FCTR_WeekdayFromDate Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByRef lpDay As Long) As Long
Public Declare Function FCTR_YearFromDate Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByRef lpYear As Long) As Long
Public Declare Function FCTR_MonthFromDate Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByRef lpMonth As Long) As Long
Public Declare Function FCTR_DayFromDate Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByRef lpDays As Long) As Long
Public Declare Function FCTR_DaysIntoYearFromDate Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByRef lpDays As Long) As Long

Public Declare Function FCTR_HourFromTime Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByRef lpHour As Long) As Long
Public Declare Function FCTR_MinuteFromTime Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByRef lpMin As Long) As Long
Public Declare Function FCTR_SecondFromTime Lib "FCTRFTxt" _
    (ByVal lpBuffer As String, ByRef lpSec As Long) As Long
```