# **ItemType**

An item's data type settings.

# Usage

Set\_Property(OLECtrlEntID, "OLE.ItemType[key]", Array)

## Values

Array has the following structure:

Pos	Name	Туре	Description	Default
<1>	Туре	Option	The item's data type	Text
<2>	Format	Formatted String	The item's output format	""

## Indices

Index	Description
key	An item's unique key

# Remarks

The ItemType property establishes the type of data and its output format. The first field sets the data type and the second field determines how the data is formatted. The data type will be used to determine how the items are sorted, since sorting dates is different than sorting strings.

## **Type**

Choose the data type that best represents the data you plan to store within the item. When you set the ItemData property, be sure to pass the data in OpenInsight's internal format. The following data types are available.

Value	Abbr.	Description
Text	Т	Plain text data sorted alphabetically
TextNoCase	TNC	Plain text data sorted alphabetically case insensitively
Number	N	Numerical data sorted by magnitude
Date	D	Day, month, and year data sorted chronologically
Time	TI	Hour, minute, and second data sorted chronologically
DateTime	DT	Date and time data sorted chronologically
Bool	В	True/false data sorted by magnitude, where false = 0 and true = 1

## **Format**

The data's format determines how it is displayed to the user. The syntax of depends upon the data type selected above. Listed below are the details on the available types and their respective format syntax.

# **Text**

You can format text, but you're limited to prefixes and suffixes. You can use any characters in the format string, but the "%S%" will always be swapped with the item's text. Any other character is treated as a literal and is displayed as is. Currently, there is no way to show "%S%" as a literal, i.e., it will **always** be swapped with the item's data.

To Display As	Use
First Name: Kevin	First Name: %S%

Kevin Esquire	%S% Esquire
Code guru Kevin works for SRP Computer Solutions, Inc.	Code guru %S% works for SRP Computer Solutions, Inc.

#### **TextNoCase**

The same as Text, but sorted case insensitively.

#### Number

Numbers are stored as floating point values within the item. Thus, if your data contains decimal values, make sure you include the decimal when you set the item's data. In other words, there is no equivalent MD2 format for the SRP Tree Control. Instead, an Excel-like syntax is employed to format and round off decimal numbers

You can use any characters in the Format string, but '#', '0', commas, and periods are reserved characters. Any other character is treated as a literal and is displayed as is. Thus, you may use literal characters in your format to prefix or suffix the data as you choose. If you need to use any reserved characters literally, then surround your literal text in single or double quotes. If you need to display quotes, place two of them side by side. The reserved characters are interpreted as follows:

Character	Displays		
#	Significant Digits Only		
0	Significant Digits or Insignificant Zeros		
comma	1. If within the number, then commas separate every three digits		
	2. If trailing the number, then the number is shown as an integer divided by 1000 for each trailing comma		
period	Decimal point. The first decimal denotes the beginning of the fractional portion of the number. All subsequent decimals are treated as literals		

Here are some example number formats:

To Display	As	Use
1234.59	1234.6	####.#
8.9	8.900	#.000
.631	0.6	0.#
44.398	\$44.40	\$0.00
1234.568	\$1,234.57	\$#,##0.00
5.25	5.25%	0.00%
12000	12,000	#,###
12000	12	#,
12200000	12.2	0.0,,

#### **Date**

Dates are stored in a proprietary format within the SRP Tree Control. Currently, dates must be in Ol's internal format when passing them to the ItemData pr operty. In other words, the SRP Tree Control will not parse string dates on your behalf. Like Numbers, the SRP Tree Control uses an Excel-like syntax to format dates.

You can use any characters in the Format field, but 'Y', 'y', 'M', 'm', 'D', and 'd' are reserved characters. Any other character is treated as a literal and is displayed as is. Thus, you may use literal characters in your format to prefix or suffix the data as you choose. If you need to use any reserved characters literally, then surround your literal text in single or double quotes. If you need to display quotes, place two of them side by side. The reserved characters are interpreted as follows:

Character(s)	Displays
YY	Years 00-99
YYYY	Years 0001-2999
М	Months 1-12
MM	Months 01-12

MMM	Months Jan-Dec	
MMMM	Months January-December	
MMMMM	Months J-D	
D	Days 1-31	
DD	Days 01-31	
DDD	Days Sun-Sat	
DDDD	Days Sunday-Saturday	

Only uppercase letters are used in the examples here, but lowercase are supported as well. However, uppercase is recommended because DateTime (below) uses capital 'M' to distinguish months from minutes.

Here are some example date formats, all them for the date January 1, 2006:

To Display As	Use
January 1, 2006	MMMM D, YYYY
Sunday, Jan 01, 2006	DDDD, MMM DD, YYYY
2006-01-01	YYYY-MM-DD
1/1/06	M/D/YY
Happy New Year! It's January 01!	"Happy New Year! It's" MMMM DD!

#### Time

Times are stored in a proprietary format within the SRP Tree Control. Currently, times must be in OI's internal format when passing them to the ItemData pr operty. In other words, the SRP Tree Control will not parse string time on your behalf. The SRP Tree Control uses an Excel-like syntax to format times.

You can use any characters in the Format field, but 'H', 'h', 'M', 'm', 'S', 's', 'A', 'a', and '0' are reserved characters. Any other character is treated as a literal and is displayed as is. Thus, you may use literal characters in your format to prefix or suffix the data as you choose. If you need to use any reserved characters literally, then surround your literal text in single or double quotes. If you need to display quotes, place two of them side by side. The reserved characters are interpreted as follows:

Character(s)	Displays	
h	Hours 0-23	
hh	Hours 00-23	
m	Minutes 0-59	
mm	Minutes 00-59	
s	Seconds 0-59	
ss	Seconds 00-59	
0	Milliseconds 0-9 (rounded to the nearest tenth)	
00	Milliseconds 00-99 (rounded to the nearest hundredth)	
000	Milliseconds 000-999	
а	a/p	
aa	am/pm	
aaa	a.m./p.m.	
А	A/P	
AA	AM/PM	
AAA	A.M./P.M.	

Only lowercase letters are used in the examples here, but uppercase are supported as well. However, lowercase is recommended because DateTime (below) uses lowercase 'm' to distinguish minutes from months.

Here are some example time formats, all them for the time 3:30:30.345 PM:

To Display As	Use
3:30:30.345 PM	h:mm:ss.000 AA
3:30:30.35 P.M.	h:mm:ss.00 AAA
3:30:30.3 PM	h:mm:ss.0 AA
03:30:30 P	hh:mm:ss A
15:30:30	h:mm:ss
15:30	h:mm
The meeting is at 3:30pm	"The meeting is at" h:mmaa

# **DateTime**

DateTimes are stored in a proprietary format within the SRP Tree Control. Currently, date & times must be in Ol's internal format when passing them to the <a href="ItemData">ItemData</a> property. In other words, the SRP Tree Control will not parse string date & times on your behalf. Like individual Dates and Times, the SRP Tree Control uses an Excel-like syntax for formatting.

You can use any characters in the Format field, but 'Y', 'y', 'M', 'm', 'D', 'd', 'H', 'h', 'S', 's', 'A', 'a', and '0' are reserved characters. Any other character is treated as a literal and is displayed as is. Thus, you may use literal characters in your format to prefix or suffix the data as you choose. If you need to use any reserved characters literally, then surround your literal text in single or double quotes. If you need to display quotes, place two of them side by side. The reserved characters are interpreted as follows:

Character(s)	Displays
YY	Years 00-99
YYYY	Years 0001-2999
М	Months 1-12
MM	Months 01-12
MMM	Months Jan-Dec
MMMM	Months January-December
MMMMM	Months J-D
D	Days 1-31
DD	Days 01-31
DDD	Days Sun-Sat
DDDD	Days Sunday-Saturday
h	Hours 0-23
hh	Hours 00-23
m	Minutes 0-59
mm	Minutes 00-59
S	Seconds 0-59
ss	Seconds 00-59
0	Milliseconds 0-9 (rounded to the nearest tenth)
00	Milliseconds 00-99 (rounded to the nearest hundredth)
000	Milliseconds 000-999
а	a/p
aa	am/pm
aaa	a.m./p.m.
Α	A/P

AA	AM/PM
AAA	A.M./P.M.

'Note that 'M' must be used for months and 'm' for minutes. All other codes can be either case.'

Here are some example date & time formats, all them for the date & time January 1, 2006 at 3:30:30.245 PM:

To Display As	Use
January 1, 2006 at 3:30 PM	MMMM D, YYYY 'at' h:mm aa
Sunday, Jan 01, 2006	DDDD, MMM DD, YYYY
2006-01-01 15:30:30	YYYY-MM-DD hh:mm:ss

#### **Bool**

Bools are stored as 1 or 0 within the SRP Tree Control, and booleans must be in this format when loading them into the SRP Tree Control. In other words, the SRP Tree Control will not parse string booleans on your behalf, such as "Yes," "No," "True" or "False." The SRP Tree Control uses a simple syntax for formatting.

You can use any characters in the Format field, but '[', '|', and ']' are reserved characters. Any other character is treated as a literal and is displayed as is. Thus, you may use literal characters in your format to prefix or suffix the data as you choose. If you need to use any reserved characters literally, then surround your literal text in single or double quotes. If you need to display quotes, place two of them side by side. The reserved characters are interpreted as follows (assuming a value of 1):

To Display As	Use
True	False]
Yes	No]
Т	F]
The value is: True	False]
, or ] when the value is True	, or ] when the value is" [True False]

Use the DefType property to set the default data type for new items.

# Example

```
// Make all items' data types dates
Set_Property(@Window:".OLE_TREE", "OLE.ItemType[All]", "Date":@FM:"MM/DD/YYYY")
```

# See Also

Item, DefType, ItemData, ItemSort