

# Command Reference: SetProperty()

## Set a property for the time series processor

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The `SetProperty()` command sets the value of a property used by the time series processor. The property will be available to subsequent commands that support using `${Property}` notation in parameters, for example to specify filenames more dynamically or use with `If()` commands. This command should not be confused with the `SetTimeSeriesProperty()` command, which sets a property on specific time series. The following functionality is provided:

- Set a property to a specified value, where the property can be a Boolean, String, DateTime, Double, or Integer type.
- Set a property to a special value such as empty string or other special values.
- Remove an existing property so that it is no longer available to the processor. Care should be taken to understand the implications of removing a property. For example, if the property is used in later commands, then removing will cause the processor to not find the property. It may be more appropriate, for example, to set a string property to an empty string rather than removing.
- Set a property by modifying a previous global property using basic manipulations.

The following dialog is used to edit this command and illustrates the syntax of the command.

**Edit SetProperty() Command**

Set (or unset) a property for the processor. The property can be referenced in parameters of other commands using `${Property}` notation. Refer to command documentation and command editors for information about support for `${Property}` in command parameters. Properties can be set using the "Set" or "Special Values" tabs. Properties can be removed (unset) using the "Remove (unset)" tab. Properties can be removed (unset) using the "Remove (unset)" tab. Existing properties can be modified using basic math using the "Math" tab.

Set | Special Values | Remove (Unset) | Math

The property value must be provided in a format that is appropriate for the type. For example, a Boolean property can have a value true or false, and Integer can only contain numbers and the negative sign. Specify date/times using standard notations to appropriate precision (e.g., YYYY-MM-DD hh:mm:ss). DateTime values also recognize the following syntax (use as appropriate for date/time precision):

- CurrentToYear = the current date to year precision
- CurrentToMinute = the current date/time to minute precision
- CurrentToMinute - 7Day = current date/time minus 7 days
- CurrentToMinute + 7Day = current date/time plus 7 days

See also the `SetInputPeriod()` command for examples of date/time modifiers, such as `.Timezone()`, which sets the time zone.

Property name:  Required - do not use spaces \$, { or } in name.

Property type:  Required - to ensure proper initialization and checks.

Property value:  Required unless special value - property value, can use `${Property}`.

Command:

Cancel OK

SetProperty

### SetProperty() Command Editor for General Set Parameters

Set Special Values Remove (Unset) Math

Use the following parameters to set properties to special values, depending on property type.  
Using special values ensures that there is no confusion interpreting the property value.  
The property name must be specified in the "Set" tab.  
The property type must be specified as String in the "Set" tab if setting to an empty string.  
The property type must be specified as Double in the "Set" tab if setting to NaN.

Set to empty string?  Optional - set String property to empty string.

Set to NaN? True  Optional - set Double property to "not a number" (NaN).

Set to null?  Optional - set any property type to null.

SetProperty\_Special

### SetProperty() Command Editor for Special Value Parameters

Set Special Values Remove (Unset) Math

Use the following parameter to remove (unset) a property.  
The processor will not have access to the property after the command (requests will return null).  
The property name must be specified in the "Set" tab.

Remove/unset property? True  Optional - remove/unset the property

SetProperty\_Remove

### SetProperty() Command Editor for Removing a Property

The following illustrates how to perform a math operation on a property. In this case, a new property name can be assigned (or existing name reused) in the `PropertyName` parameter. The `PropertyValue` parameter must specify the name of an existing property using `${Property}` notation. This causes the old value to be retrieved and then the math operation is performed. A common operation would be to increment a property's value in a `For()` loop.

**Edit SetProperty() Command**

Set (or unset) a property for the processor. The property can be referenced in parameters of other commands using `${Property}` notation. Refer to command documentation and command editors for information about support for `${Property}` in command parameters. Properties can be set using the "Set" or "Special Values" tabs. Properties can be removed (unset) using the "Remove (unset)" tab. Properties can be removed (unset) using the "Remove (unset)" tab. Existing properties can be modified using basic math using the "Math" tab.

**Set** | Special Values | Remove (Unset) | Math

The property value must be provided in a format that is appropriate for the type.  
 For example, a Boolean property can have a value true or false, and Integer can only contain numbers and the negative sign.  
 Specify date/times using standard notations to appropriate precision (e.g., YYYY-MM-DD hh:mm:ss).  
 DateTime values also recognize the following syntax (use as appropriate for date/time precision):  
 CurrentToYear = the current date to year precision  
 CurrentToMinute = the current date/time to minute precision  
 CurrentToMinute - 7Day = current date/time minus 7 days  
 CurrentToMinute + 7Day = current date/time plus 7 days  
 See also the `SetInputPeriod()` command for examples of date/time modifiers, such as `.Timezone()`, which sets the time zone.

Property name:  Required - do not use spaces \$, { or } in name.  
 Property type:  Required - to ensure proper initialization and checks.  
 Property value:  Required unless special value - property value, can use `${Property}`.

Command: 

```
SetProperty(PropertyName="IntegerProp1", PropertyType=Integer, PropertyValue="${IntegerProp1}", Add=10)
```

Cancel OK

SetProperty\_Math1

### SetProperty() Command Editor for Performing Math showing Main Property Parameters

**Set** | Special Values | Remove (Unset) | **Math**

Use the following parameters to perform basic math operations on the property.  
 The value must be consistent with the property type and math operation, as follows:  
 DateTime - can add or subtract an interval such as 1Day, 15Minute  
 Double - can add, subtract, multiply, or divide by a number  
 Integer - can add, subtract, multiply, or divide by an integer  
 String - can concatenate (add), remove (subtract), or replicate (append multiple times)

Add:  Optional - value to add.  
 Subtract:  Optional - value to subtract.  
 Multiply:  Optional - value to multiply.  
 Divide:  Optional - value to divide.

SetProperty\_Math2

### SetProperty() Command Editor for Performing Math showing Math Input

The command syntax is as follows:

```
SetProperty(Parameter=Value,...)
```

#### Command Parameters

Parameter	Description	Default
PropertyName	The property name.	None – must be specified.
PropertyType	The property type, used for validation, one of: <ul style="list-style-type: none"> <li>Boolean – a boolean</li> <li>DateTime – a date/time</li> <li>Double – a floating point number</li> <li>Integer – an integer</li> <li>String – a string</li> </ul> DateTime objects can be specified with special syntax to use current time and modifiers on the DateTime. See the <code>SetInputPeriod()</code> command for more information.	None – must be specified as when setting a new property, although is not needed when setting to null or removing.
PropertyValue	The value of the property, adhering to property type constraints. Date/time properties should be specified using standard formats such as “YYYY-MM-DD hh:mm:ss”, to an appropriate precision. Special date/time syntax is recognized, as shown in the above figure. Global properties can be used with the <code>\${Property}</code> syntax.	None – must be specified when setting a value. The parameter is not needed when setting special values or removing the property.
SetEmpty	If specified as <code>True</code> , the String property will be set to an empty string.	The PropertyValue parameter will be used.
SetNaN	If specified as <code>True</code> , the Double property will be set to the special “not a number” (NaN) value.	The PropertyValue parameter will be used.
SetNull	If specified as <code>True</code> , the property will be set to null (not specified).	The PropertyValue parameter will be used.
RemoveProperty	If specified as <code>True</code> , the property will be removed and will be unavailable to the processor. Only user-defined properties can be removed (not important internal properties).	The PropertyValue parameter will be used.
Add	Value to add to the property value: <ul style="list-style-type: none"> <li>Double or Integer property value will be incremented by Add.</li> <li>String property value will have Add appended.</li> <li>DateTime property value will be shifted forward in time by Add (e.g., <code>Add=1Day</code>).</li> </ul>	No addition.
Subtract	Value to subtract from the property value: <ul style="list-style-type: none"> <li>Double or Integer property value will be decremented by Add.</li> <li>String property value will have Add remove for all occurrences.</li> </ul>	No subtraction.

Parameter	Description	Default
	<ul style="list-style-type: none"><li>DateTime property value will be shifted back in time by Add (e.g., Add=1Day).</li></ul>	
Multiply	Value to multiply the property value: <ul style="list-style-type: none"><li>Double or Integer property value will be multiplied by Add.</li></ul>	No multiplication.
Divide	Value to divide the property value: <ul style="list-style-type: none"><li>Double or Integer property value will be divided by Add. Dividing by zero will set the result to NaN for Double and null for Integer.</li></ul>	No division.

A sample command file is as follows:

```
SetProperty(PropertyName="Scenario",PropertyType=String,PropertyValue="Likely")
```

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