

PBA text replacement for SQL Server dates

The following discusses how to replace date fields in queried SQL Server features that are being placed as a cell.

A cell is created and specified in the Symbology tab of the Symbology node. In this example, the text values [DATE_ADDED] and [DATE_EDITED] are used as placeholders for the database date properties.

Note: There is no formatting associated with date fields in SQL Server. The display of the date is controlled by the application getting the dates from the database.

	PKID	AssetCode	Geom	Date_Added	Date_Edited
1	405	LBU-LB-0001	0xE6100000010D4F1D63EE5A5A4440ED263108ACFC5BC000...	2015-10-20	2016-03-14
2	425	PPM-PP-8745	0xE6100000010DD6E240FB915A4440AB2413899CFC5BC0000...	2016-04-14	2016-04-14
3	436	FFX-FF-6542	0xE6100000010D282CD4EA865A4440068441A5D4FC5BC0000...	1989-06-23	2017-01-15
4	439	CHW-CS-4896	0xE6100000010DC94A761F565A444095BB6041E6FC5BC0000...	1962-12-24	2017-01-15

When SQL Server features are registered, date properties are set as follows:

Store Last Value: none

Format: dd-MMM-yyyy

Min Date:

Max Date:

Ticks Long Date Show None Short Date Century Date Show Time Up Down

Read Only Do not Clear Required

Save Changes Key:

Tool Tip: Enter Date_Added

Initial Values						
Key	Synch Preference	Value Type	Value	Value Length	Increment Type	Increment Value Type
placing	<input checked="" type="checkbox"/>	dateTimeTicks			none	value
*	<input type="checkbox"/>					

For the Date_Edited property, an Editing key was added and set to dateTimeTicks. This enables Bentley Map to extract the current date and apply it to this field when the feature is edited.

Save Changes Key:

Tool Tip:

Initial Values

Key	Synch Preference	Value Type	Va
placing	<input checked="" type="checkbox"/>	dateTimeTicks	
editing	<input type="checkbox"/>	dateTimeTicks	
*	<input type="checkbox"/>		

The display format can be changed to any number of valid formats as described in the following table:

Format	Description
d	The one- or two-digit day.
dd	The two-digit day. Single-digit day values are preceded by a 0.
ddd	The three-character day-of-week abbreviation.
dddd	The full day-of-week name.
h	The one- or two-digit hour in 12-hour format.
hh	The two-digit hour in 12-hour format. Single digit values are preceded by a 0.
H	The one- or two-digit hour in 24-hour format.
HH	The two-digit hour in 24-hour format. Single digit values are preceded by a 0.
m	The one- or two-digit minute.
mm	The two-digit minute. Single digit values are preceded by a 0.
M	The one- or two-digit month number.

Format	Description
MM	The two-digit month number. Single digit values are preceded by a 0.
MMM	The three-character month abbreviation.
MMMM	The full month name.
s	The one- or two-digit seconds.
ss	The two-digit seconds. Single digit values are preceded by a 0.
t	The one-letter A.M./P.M. abbreviation (A.M. is displayed as "A").
tt	The two-letter A.M./P.M. abbreviation (A.M. is displayed as "AM").
y	The one-digit year (2001 is displayed as "1").
yy	The last two digits of the year (2001 is displayed as "01").
yyyy	The full year (2001 is displayed as "2001").

When defining text replacement, you may find yourself inserting *Simple Replacement Text* for date properties. This will result in date ticks being used rather than properly formatted date fields.

Override Cell Symbology	<input type="checkbox"/>
Replacement Text	[Date_Added]
Replacement Text	[Date_Edited]
Replacement Text Details	
Old Text	Type
[DATE_ADDED]	Expression

Date Added:
635961888000000000

Date Edited:
635961888000000000

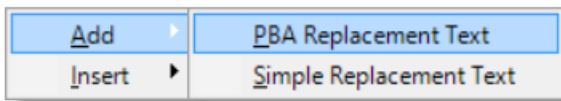
Analyze Result

...

Apply

Points	
Property	Value
PKID	425
Asset Code	PPM-PP-8745
Date_Added	2016-04-14
Date_Edited	2016-04-14

To overcome this, select *PBA Replacement Text* instead of a *Simple Replacement Text*.



The *Value* field can be any text string and is used to identify the replacement text. In this example, *Date_Added* and *Date_Edited* are used.

Replacement Text	Date_Added
Replacement Text	Date_Edited

In the Details section, the *Old Text* is defined as the text to replace. In this example, its *[DATE_ADDED]* and *[DATE_EDITED]* in the cell that will be placed during the query process.

Date Added:
[DATE_ADDED]

Date Edited:
[DATE_EDITED]

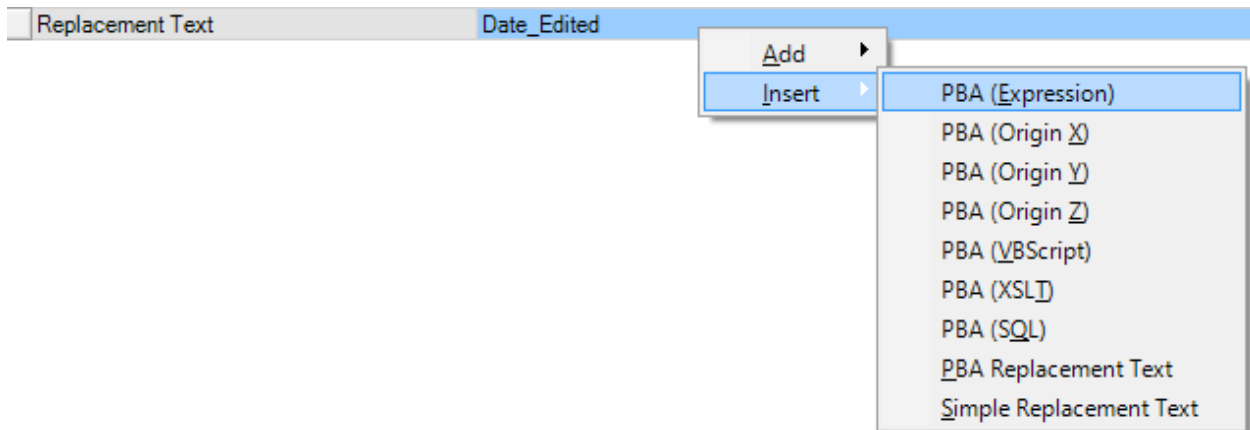
Details for Date_Added property:

Replacement Text	Date_Added
Replacement Text Details	
Old Text	Type
[DATE_ADDED]	PBA

Details for Date_Edited property:

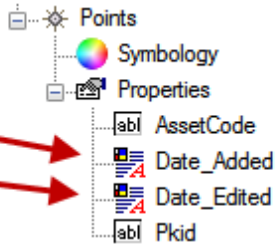
Replacement Text	Date_Edited
Replacement Text Details	
Old Text	Type
[DATE_EDITED]	PBA

When the replacement text has been defined, the associated PBA needs to be created. This is done by highlighting the Replacement Text key and selecting *Insert > PBA (Expression)* from the right click menu.



A new PBA key is inserted above the Replacement Text. The value of the PBA key is edited from the default *[Expression]* to the name of the feature property being replaced. Note that the property name must be enclosed in square brackets as shown:

PBA	[Date_Added]
Replacement Text	Date_Added
PBA	[Date_Edited]
Replacement Text	Date_Edited



Finally, in the PBA Details, change the default Name *New* to the value of the Replacement Text key. In this example, it's *Date_Added* and *Date_Edited*. The Type value will remain as a *PBA Expression*.

Date Added PBA Details:

PBA	[Date_Added]
Replacement Text	Date_Added

PBA Details	
Name	Type
Date_Added	PBA (Expression)

Date Edited PBA Details:

PBA	[Date_Edited]
Replacement Text	Date_Edited

PBA Details	
Name	Type
Date_Edited	PBA (Expression)

Date Added:
2015-10-20

Date Edited:
2016-03-14

Analyze Result

Points	
Property	Value
PKID	405
Asset Code	LBU-LB-0001
Date_Added	2015-10-20
Date_Edited	2016-03-14

When placing new features, the Date Added and Date Edited fields are automatically set to the current date:

Place Points

Spin

AssetCode:

Date Added: 2017-01-18

Date Edited: 2017-01-18

Pkid:

Date Added:
2017-01-18

Date Edited:
2017-01-18

However, they can be set manually as well:

Edit Points

AssetCode: LBU-LB-0001

Date Added: 2015-10-20

Date Edited: 2017-01-18

Pkid:

January 2017

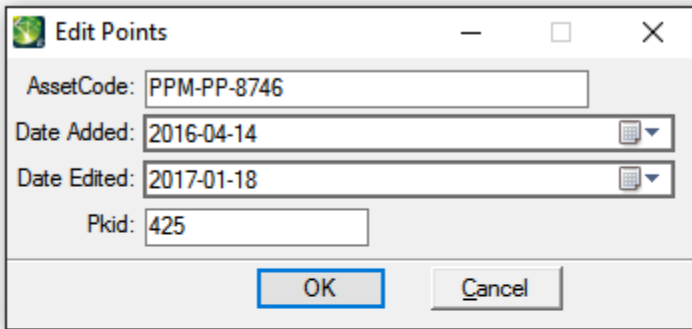
Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

Today: 17/01/18

Date Added:
2015-10-20

Date Edited:
2016-03-14

Finally, when queried features are edited, the Date Edited field will automatically update to capture the current date:



AssetCode: PPM-PP-8746
Date Added: 2016-04-14
Date Edited: 2017-01-18
Pkid: 425

OK Cancel

Before Editing:



Date Added:
2016-04-14

Date Edited:
2016-04-15

After Editing:



Date Added:
2016-04-14

Date Edited:
2017-01-18