

Bentley Map Tips and Tricks

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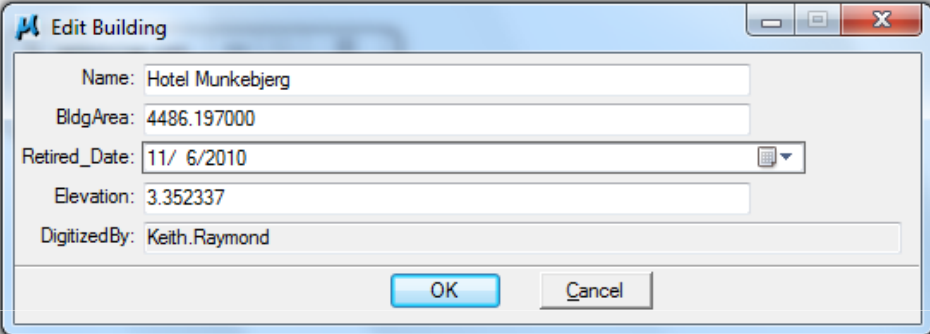


Tips and Tricks

- Area calculations
- Z elevation
- Read scored feature
- Annotation with VBScript
- Interoperability
 - Saved IMPX files
 - Assign elevation
- Split/Merge
- 3D City

Area Calculations and Elevations

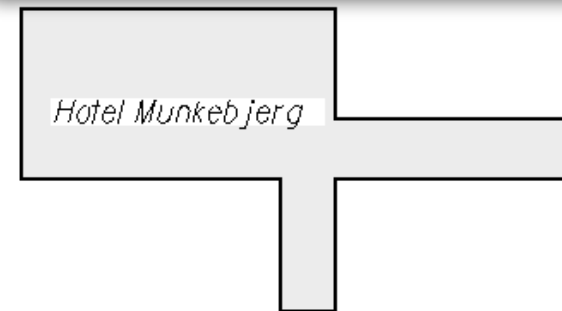
- Really using functions to assign properties automatically
- Example:
 - Area
 - `[XFM.Round([Building.AREA],3)]`
 - Z elevation
 - `[Building.FeaturesCentroid.Z]`
 - Username
 - `System.Environment.UserName()`



Dialog box titled "Edit Building" showing the following fields:

- Name: Hotel Munkebjerg
- BldgArea: 4486.197000
- Retired_Date: 11/ 6/2010
- Elevation: 3.352337
- DigitizedBy: Keith.Raymond

Buttons: OK, Cancel



Use areatest.xml

Read Scored Feature

- An XFM key in which features are evaluated and assigned properties based on symbology
 - `If(Pipe.color=1, "150", If(Pipe.color=2,"300","80"))`
- If color is 1, diameter is assigned 150
- If color is 2, diameter is assigned 300
- All others are assigned 80
- Works for reset and review (including reference files)

Key	Synch Preference	Value Type	Value
placing	<input checked="" type="checkbox"/>	value	
readScoredFeature	<input type="checkbox"/>	expressionEvaluator	<code>If(Pipe.color=1, "150", If(Pipe.color=2,"300","80"))</code>

Annotation with VBScript

- Format complex annotations
- Latitude and Longitude example
- Sets annotation based on positive and negative lat/long
- Add degree, minute and second marks
- Format to two lines

```
Function formatl ([LATITUDE], [LONGITUDE])
LAT= Fix(Abs([LATITUDE]))
if [LATITUDE] > 0 and [LATITUDE] <= 90 then
formatl = "N " & LAT & Chr(186)
Elseif [LATITUDE] < 0 and [LATITUDE] => -90 then
formatl = "S " & LAT & Chr(186)
Elseif [LATITUDE] = 0 then
formatl = LAT & Chr(186)
Else
formatl = "Not a valid latitude"
Exit Function
End If

Min= Abs((([LATITUDE] - Fix([LATITUDE]))) * 60)
formatl = formatl & Int(Min) & ""
Sec = Fix(([Min] - Fix([Min])) * 60)
formatl = formatl & Sec & ""

' add newline
formatl = formatl & Chr(10)

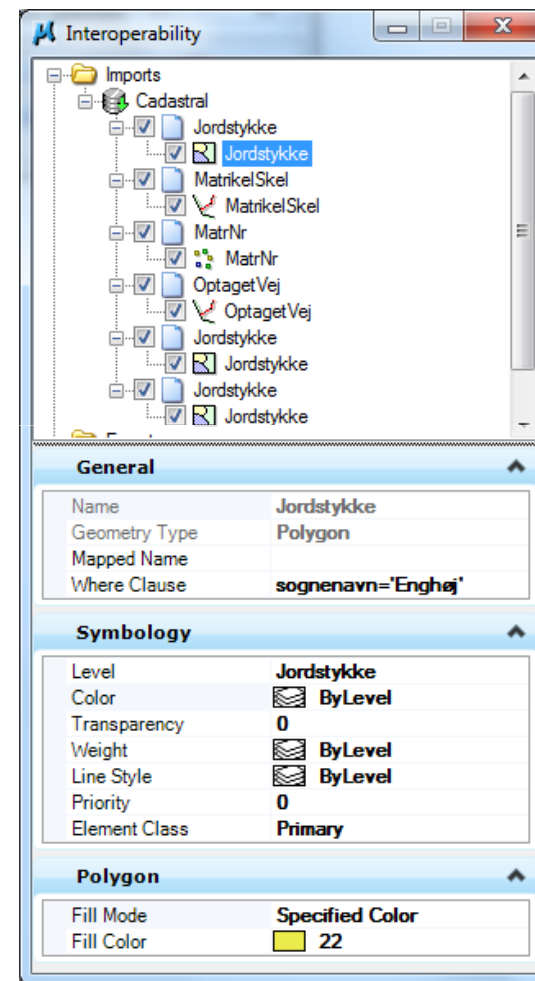
LNG = Fix(Abs([LONGITUDE]))

if [LONGITUDE] > 0 and [LONGITUDE] <= 180 then
formatl = formatl & "E " & LNG & Chr(186)
Elseif [LONGITUDE] < 0 and [LONGITUDE] => -180 then
formatl = formatl & "W " & Abs(LNG) & Chr(186)
Elseif [LONGITUDE] = 0 then
formatl = formatl & LNG & Chr(186)
Else
formatl = "Not a valid longitude"
Exit Function
End If

Min= Abs((([LONGITUDE] - Fix([LONGITUDE]))) * 60)
formatl = formatl & Int(Min) & ""
Sec = Fix(([Min] - Fix([Min])) * 60)
formatl = formatl & Sec & ""
End Function
```

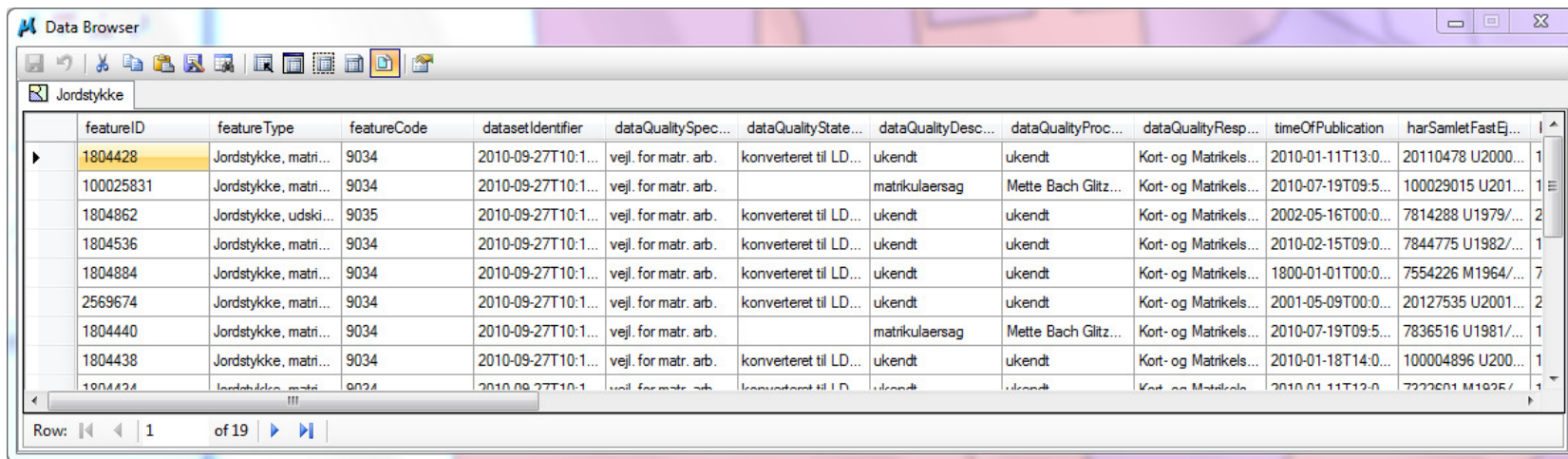
Interoperability

- Label points by selecting a text type and defining a property
- Divide features into classes using 'Where' clause
- Save import session for reuse
- Reference import file



Data Browser

- Review, report, edit attribute data in a spreadsheet like grid
- Sort, query, filter results
- Output to various formats; CSV, TXT, XML, HTML
- Copy and Paste to Windows programs

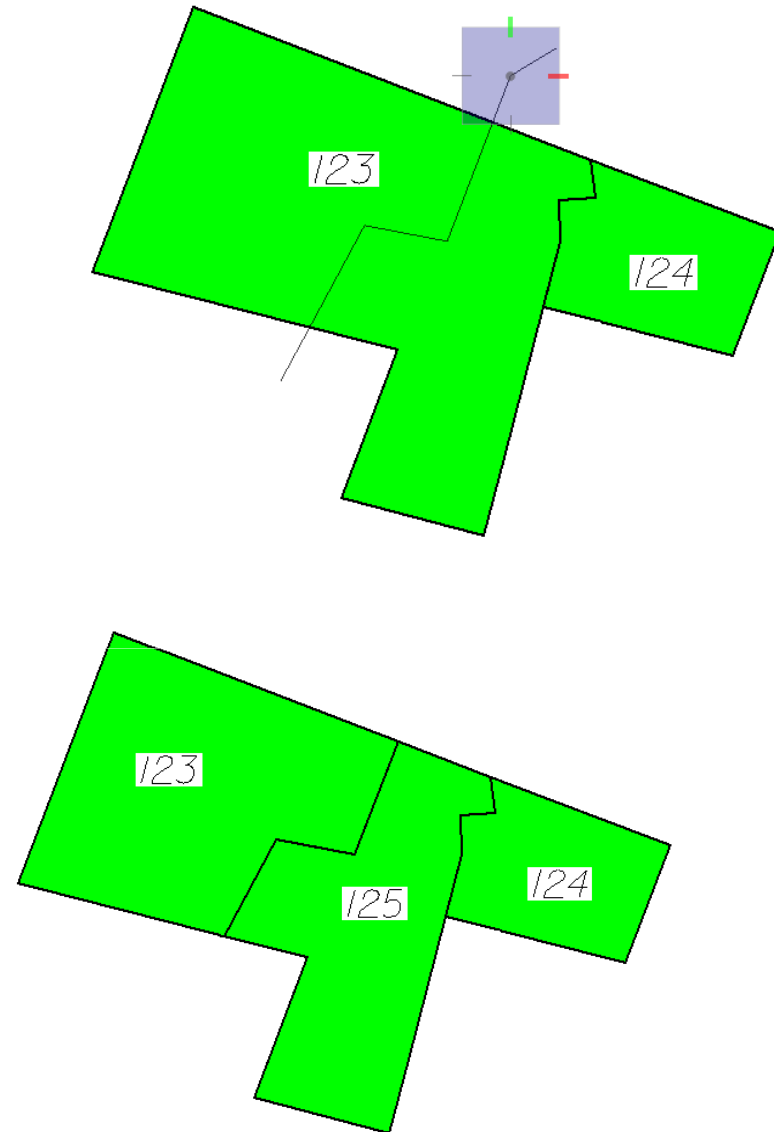


The screenshot shows the Data Browser application window. The title bar reads "Data Browser". The main area displays a table with the following columns: featureID, featureType, featureCode, datasetIdentifier, dataQualitySpec..., dataQualityState..., dataQualityDesc..., dataQualityProc..., dataQualityResp..., timeOfPublication, and harSamletFastEj... The table contains 19 rows of data. The first row is highlighted in yellow. The status bar at the bottom indicates "Row: 1 of 19".

featureID	featureType	featureCode	datasetIdentifier	dataQualitySpec...	dataQualityState...	dataQualityDesc...	dataQualityProc...	dataQualityResp...	timeOfPublication	harSamletFastEj...
1804428	Jordstykke, matri...	9034	2010-09-27T10:1...	vejl. for matr. arb.	konverteret til LD...	ukendt	ukendt	Kort- og Matrikels...	2010-01-11T13:0...	20110478 U2000...
100025831	Jordstykke, matri...	9034	2010-09-27T10:1...	vejl. for matr. arb.		matrikulaersag	Mette Bach Glitz...	Kort- og Matrikels...	2010-07-19T09:5...	100029015 U201...
1804862	Jordstykke, udski...	9035	2010-09-27T10:1...	vejl. for matr. arb.	konverteret til LD...	ukendt	ukendt	Kort- og Matrikels...	2002-05-16T00:0...	7814288 U1979/...
1804536	Jordstykke, matri...	9034	2010-09-27T10:1...	vejl. for matr. arb.	konverteret til LD...	ukendt	ukendt	Kort- og Matrikels...	2010-02-15T09:0...	7844775 U1982/...
1804884	Jordstykke, matri...	9034	2010-09-27T10:1...	vejl. for matr. arb.	konverteret til LD...	ukendt	ukendt	Kort- og Matrikels...	1800-01-01T00:0...	7554226 M1964/...
2569674	Jordstykke, matri...	9034	2010-09-27T10:1...	vejl. for matr. arb.	konverteret til LD...	ukendt	ukendt	Kort- og Matrikels...	2001-05-09T00:0...	20127535 U2001...
1804440	Jordstykke, matri...	9034	2010-09-27T10:1...	vejl. for matr. arb.		matrikulaersag	Mette Bach Glitz...	Kort- og Matrikels...	2010-07-19T09:5...	7836516 U1981/...
1804438	Jordstykke, matri...	9034	2010-09-27T10:1...	vejl. for matr. arb.	konverteret til LD...	ukendt	ukendt	Kort- og Matrikels...	2010-01-18T14:0...	100004896 U200...
1804434	Jordstykke, matri...	9034	2010-09-27T10:1...	vejl. for matr. arb.	konverteret til LD...	ukendt	ukendt	Kort- og Matrikels...	2010-01-11T13:0...	7222601 M1925/...

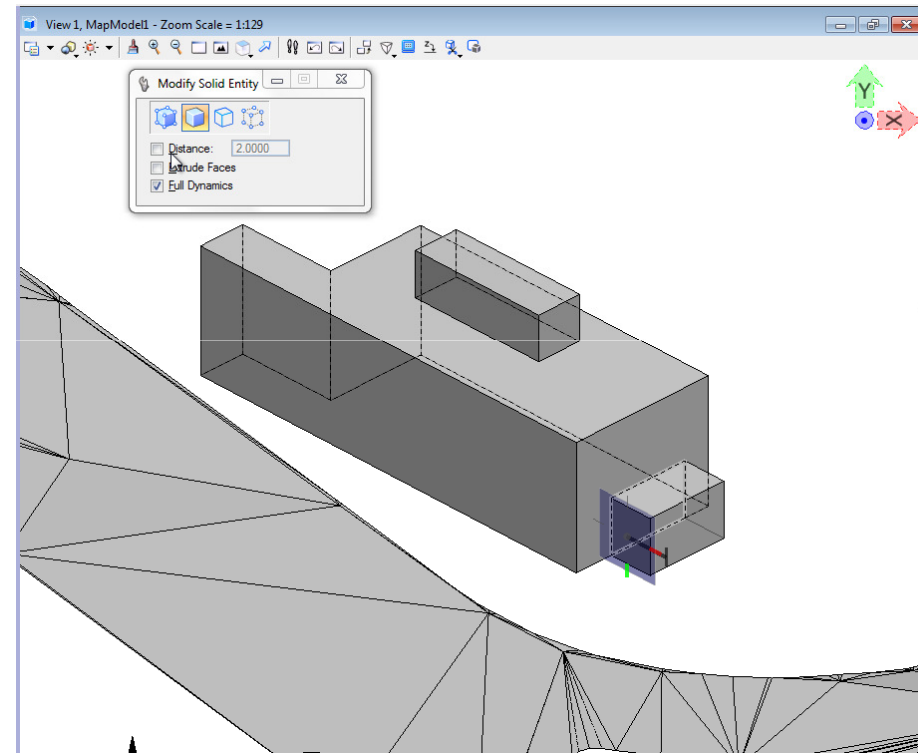
Split/Merge Polygons

- Splits and merges polygons
- If properties exist:
 - Split: both new features get the same properties
 - Merge: first selected polygons properties are retained



3D City Tools

- Leverage MicroStation solid modeling tools to build the model
- Bentley Map tools to promote collection of 3D shapes to one building feature
- Assign properties
- Convert from polygon representation to solid and back for storage and posting



Modeling

Thematic