LESSON LEARNED: THREE YEARS OF ARCGIS RUNTIME FOR WPF | DEVSUMMIT 2014

Foliage

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Developing products with a difference.

Available for download right now

- http://bjorn.kuiper.nu

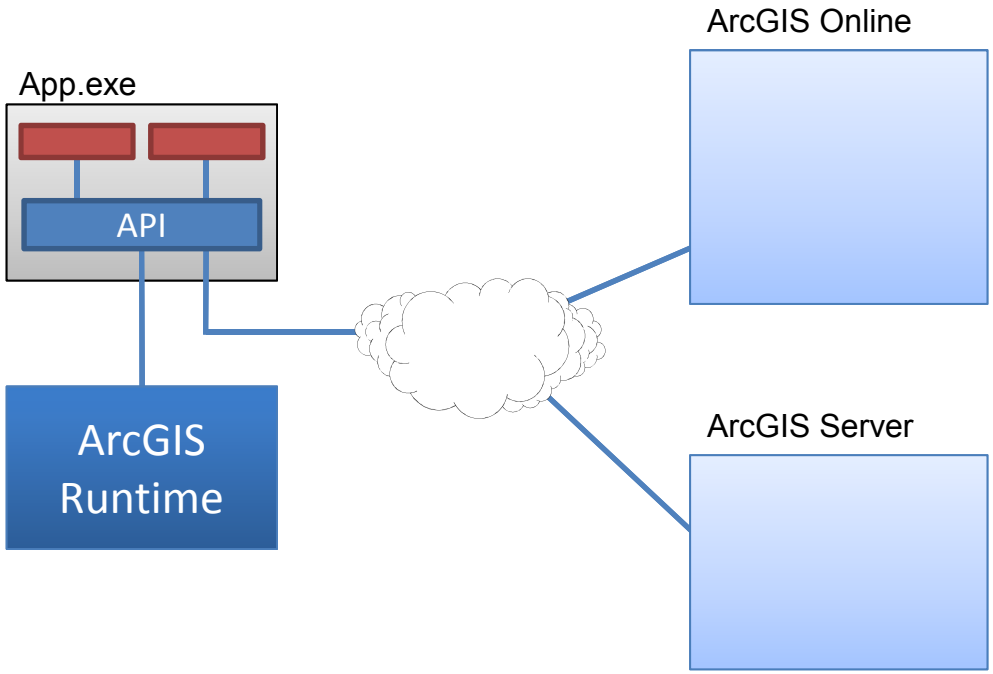
Presentation

Windows Forms
&
ArcObjects SDK

ArcGIS Background

Image source: “web monkey loved the ADF” from Dave Bouwman blog

Why use ArcGIS Runtime



ArcGIS Runtime diagram

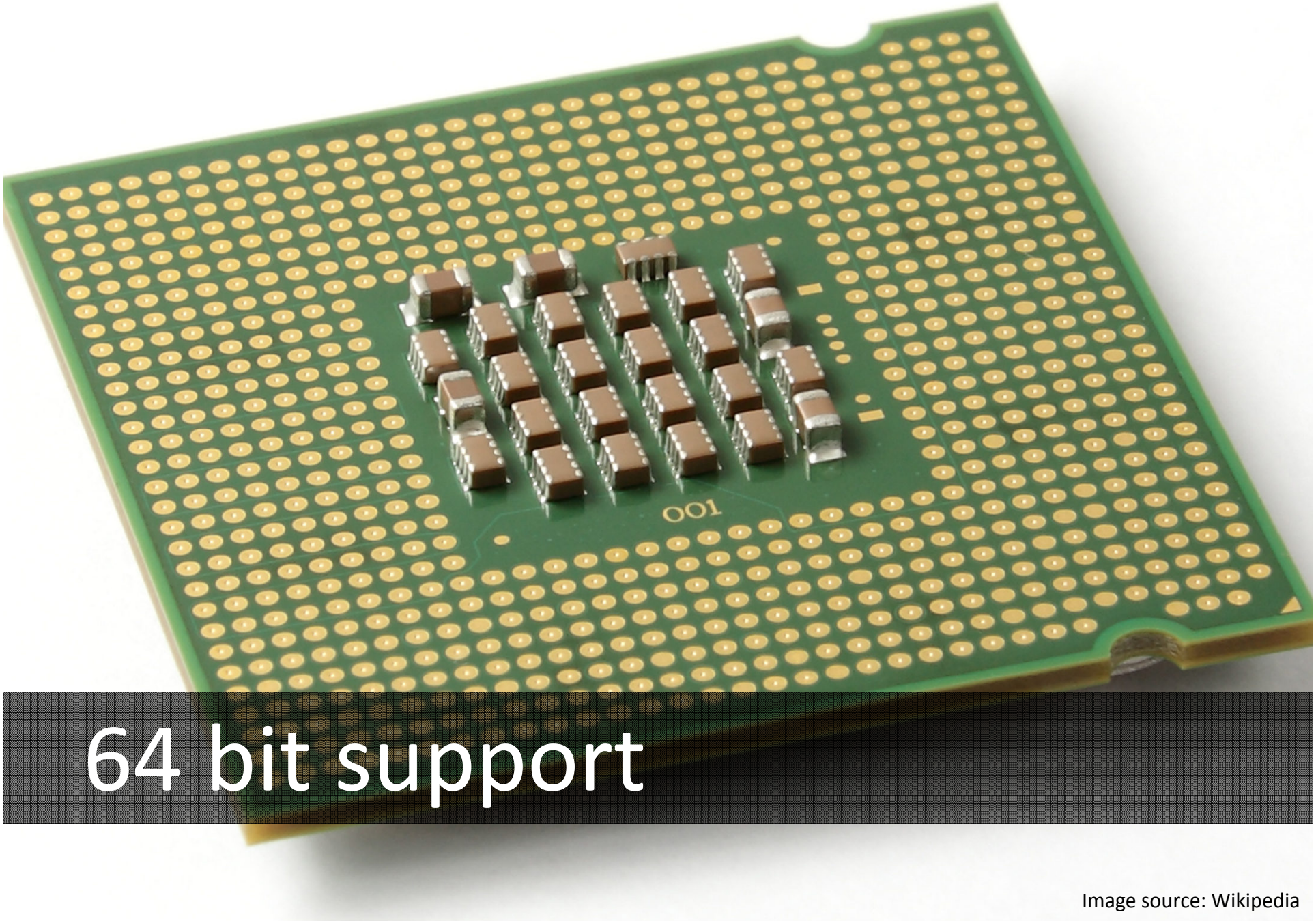
Diagram source: Esri UC 2011 ArcGIS Runtime presentation

Footprint

Maintenance

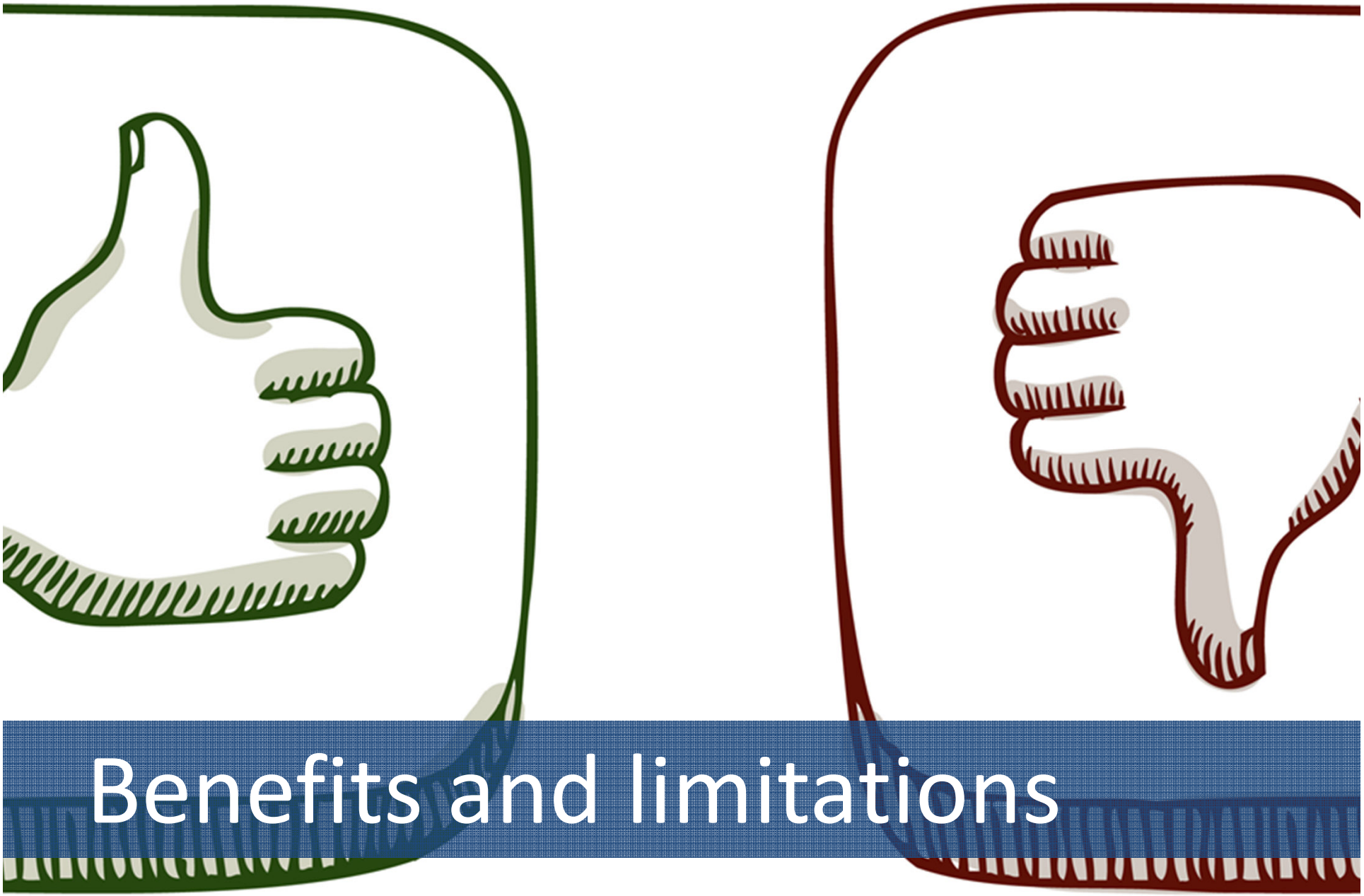
Built for performance

Map & Geoproc. packages



64 bit support

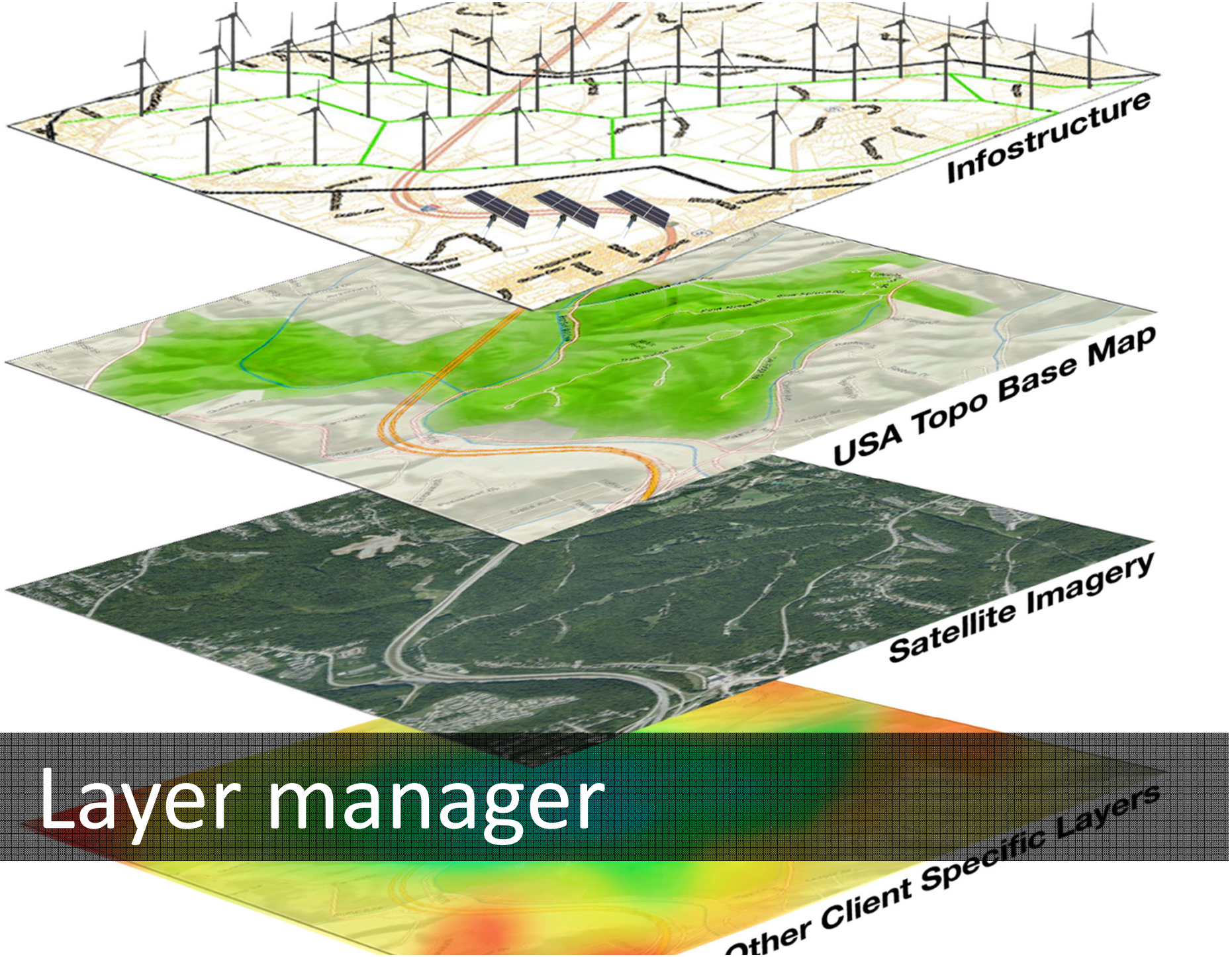
Image source: Wikipedia



Benefits and limitations

Code extensions

Image source: Electrici-Tree by Vahakn Matossian



Layer manager

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   "types": [ "route" ],
   "formatted_address": "7th Main Rd, Koramangala, Bengaluru, Karnataka 560034, India",
   "address_components": [ {
     "long_name": "7th Main Rd",
     "short_name": "7th Main Rd",
     "types": [ "route" ]
   }, {
     "long_name": "Koramangala",
     "short_name": "Koramangala",
     "types": [ "sublocality", "political" ]
   }, {
     "long_name": "Bengaluru",
     "short_name": "Bengaluru",
     "types": [ "locality", "political" ]
}, {   "long_name": "Bengaluru",
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     "types": [ "administrative_area_level_2", "political" ]
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     "types": [ "administrative_area_level_1", "political" ]
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     "short_name": "IN",
     "types": [ "country", "political" ]
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     "short_name": "560034",
     "types": [ "postal_code" ]
   } ],
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     "location":{    "lat": 12.9259085,   "lng": 77.6334715     },
     "location_type": "GEOMETRIC_CENTER",
     "viewport": {
       "southwest": {         "lat": 12.9227118,         "lng": 77.6301852      },
       "northeast": {         "lat": 12.9290071,         "lng": 77.6364805
       }
     },
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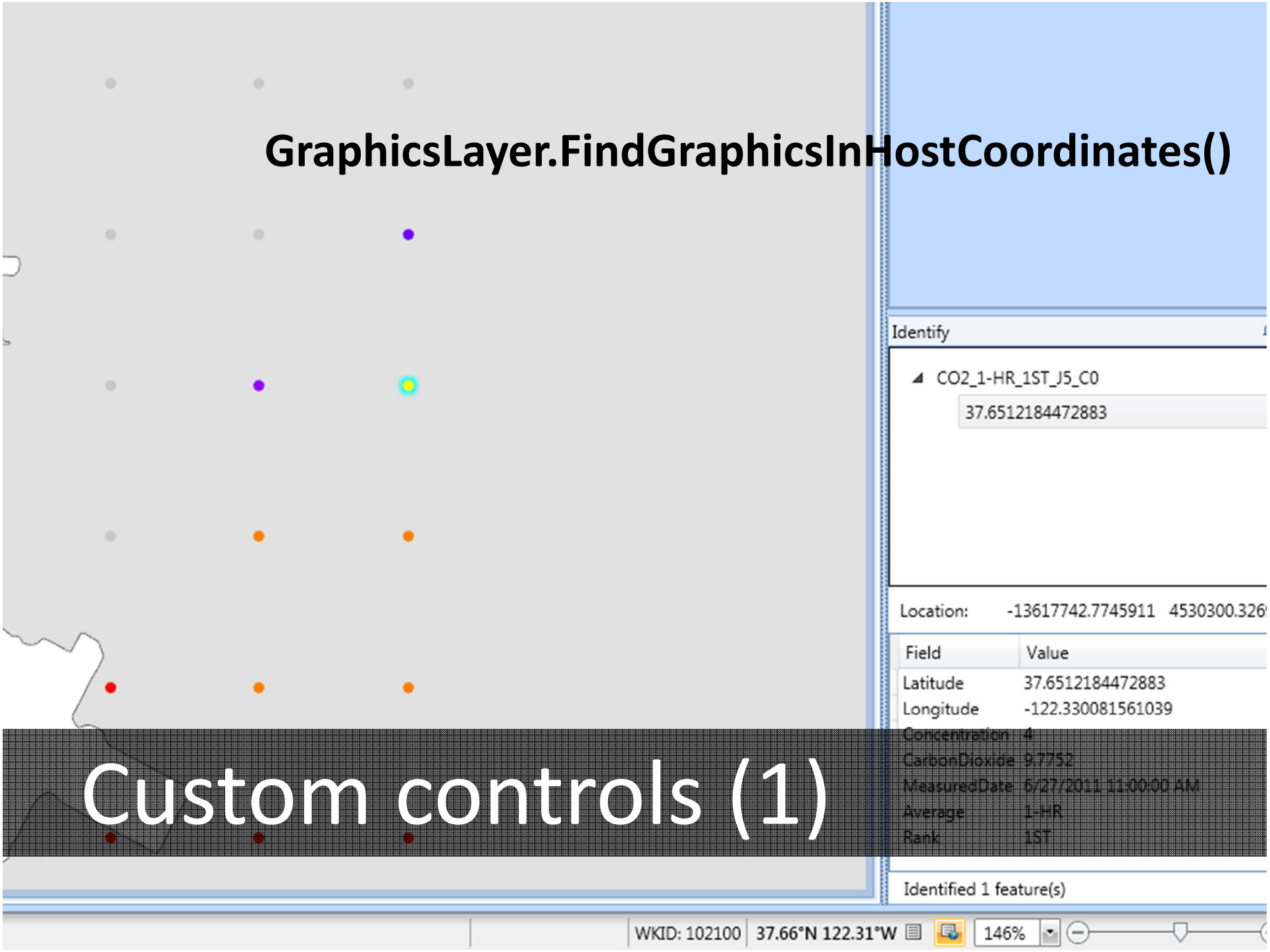
         "lng": 77.6330486
       },
       "northeast": {
         "lat": 12.9269574,
```


Storing layers in JSON format

CATCH ALL THE ERRORS!
Capture GPK messages


GraphicsLayer.FindGraphicsInHostCoordinates()
Identify
CO2_1-HR_1ST_J5_C0
37.6512184472883
Location: -13617742.7745911 4530300.326
Field
Value
Latitude
37.6512184472883
Longitude
-122.330081561039
Concentration
4
CarbonDioxide
9.7752
MeasuredDate
6/27/2011 11:00:00 AM
Average
1-HR
Rank
1ST
Identified 1 feature(s)
WKID: 102100
37.66°N 122.31°W
146%
Custom controls (1)

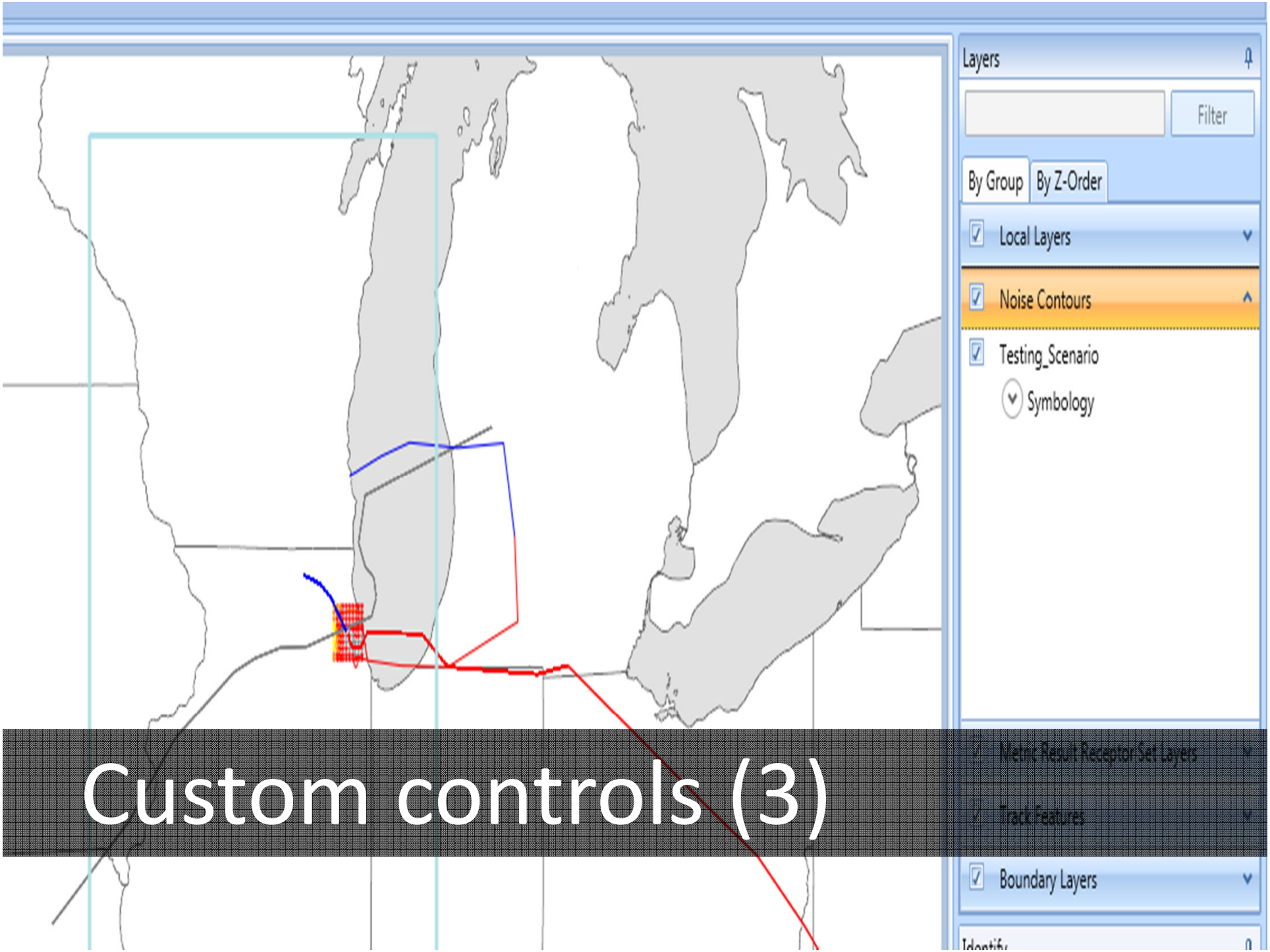
J5_C0 ×

d drop it here to group by that column

Longitude	Concentration	CarbonDioxide	MeasuredDate	Average	Rank
-122.381076024295	-1	0	1/1/0001 12:00:00 AM	1-HR	1ST
-122.364075165851	-1	0	1/1/0001 12:00:00 AM	1-HR	1ST
-122.347074308466	-1	0	1/1/0001 12:00:00 AM	1-HR	1ST
-122.330073453812	-1	0.000424575	6/27/2011 11:00:00 AM	1-HR	1ST
-122.313	-1	0	1/1/0001 12:00:00 AM	1-HR	1ST
-122.296	-1	0	1/1/0001 12:00:00 AM	1-HR	1ST

Custom controls (2)

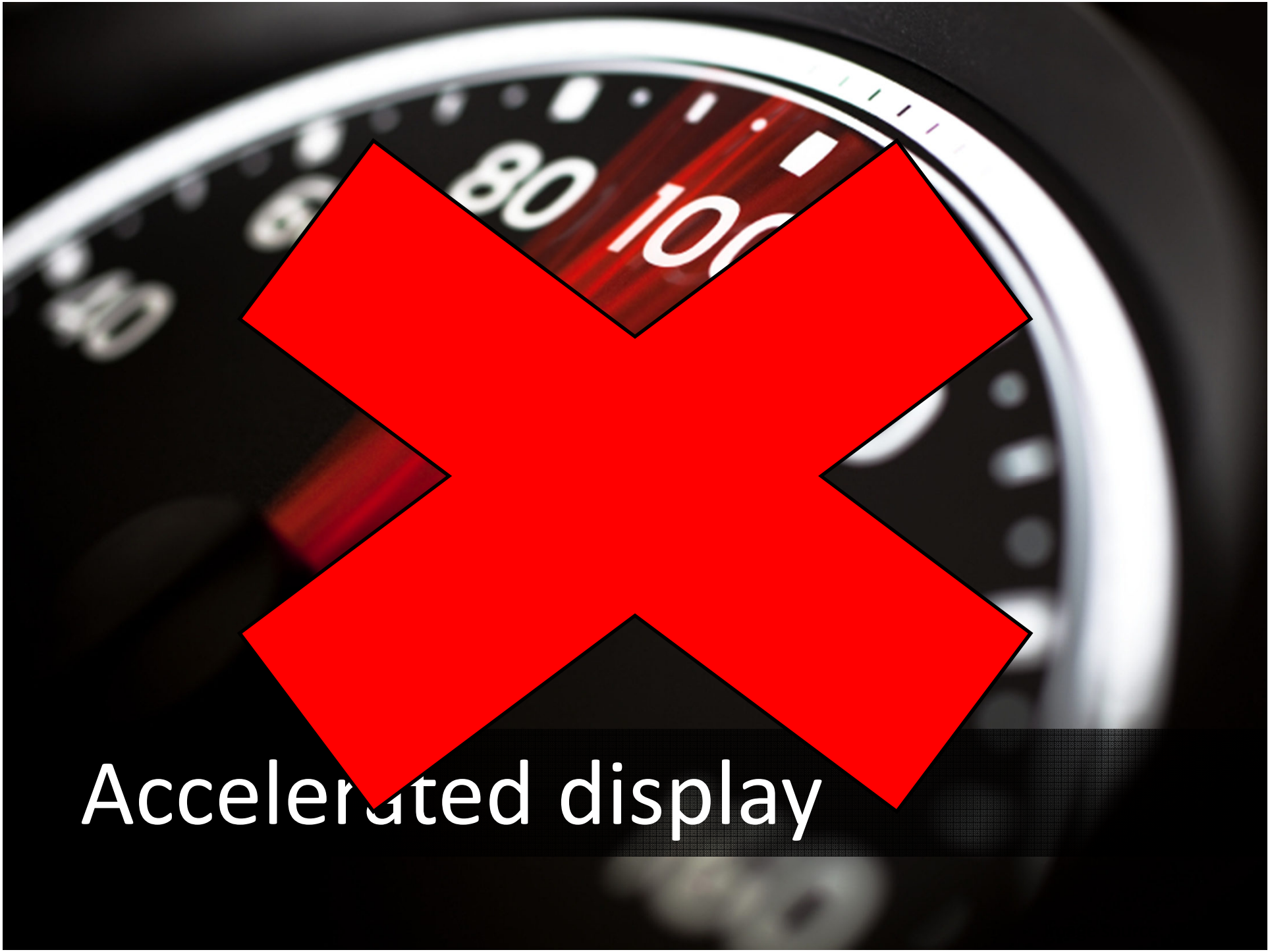
WKID: 1021



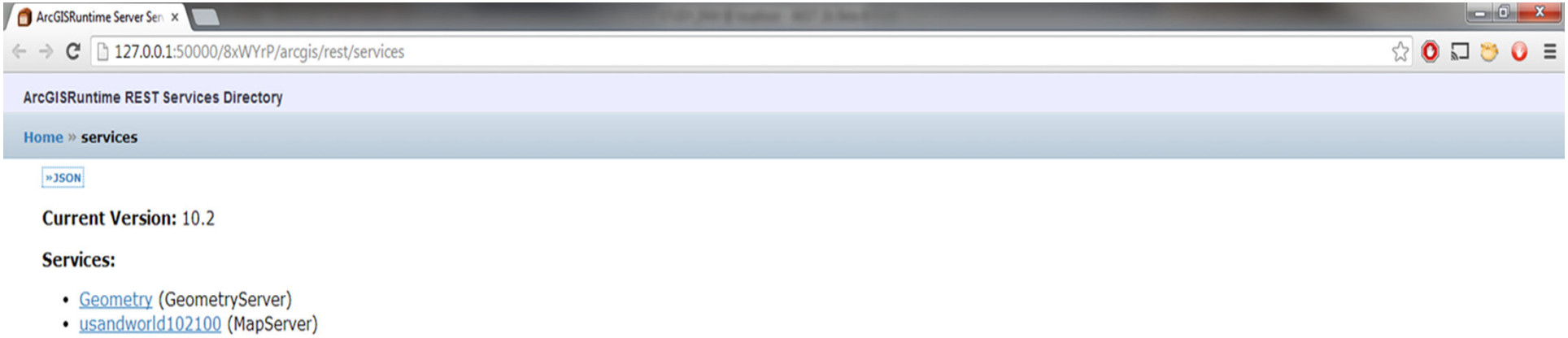
Custom controls (3)

Tips and tricks

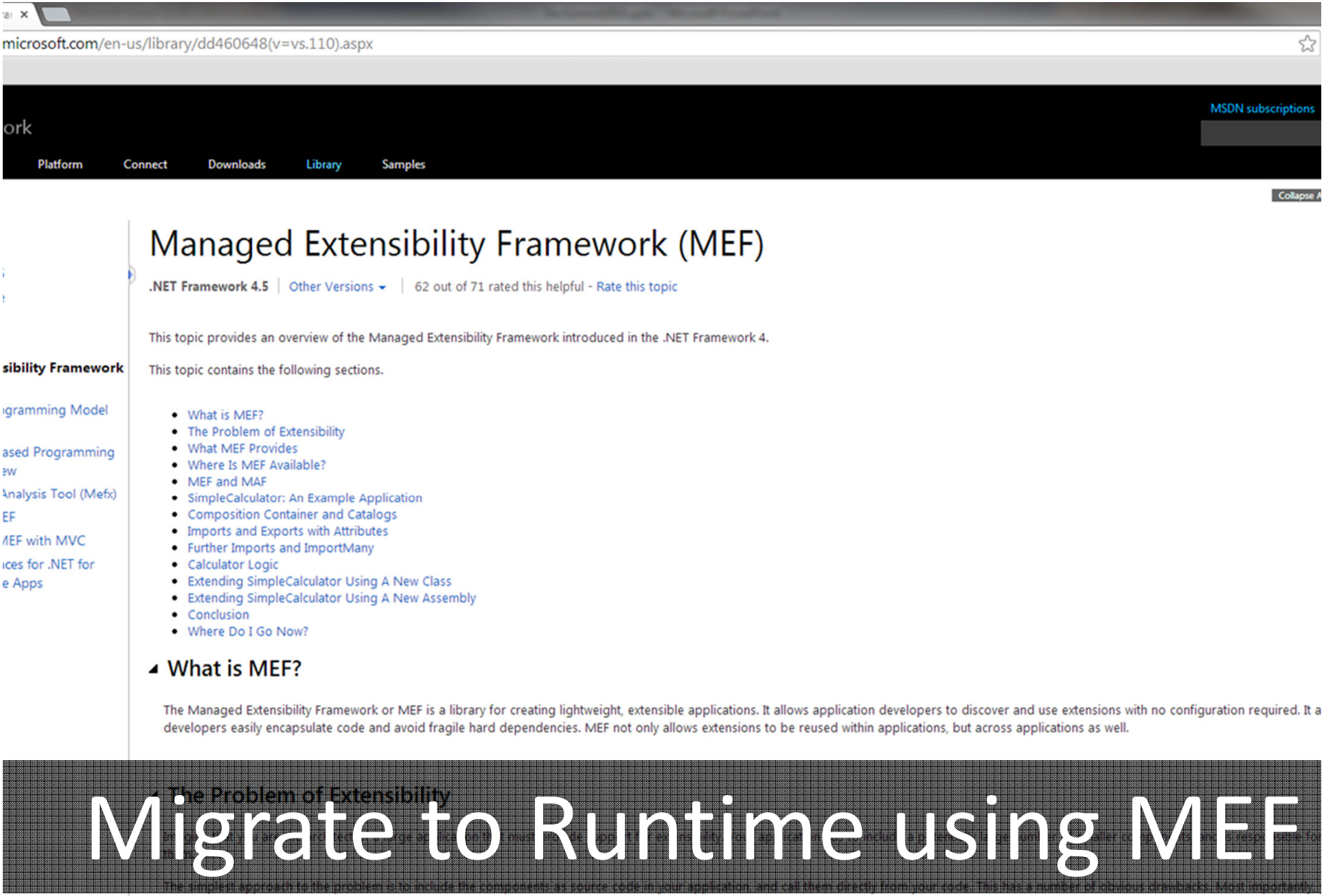
Accelerated display


Accelerated display

Manage Runtime folders



Display Runtime services

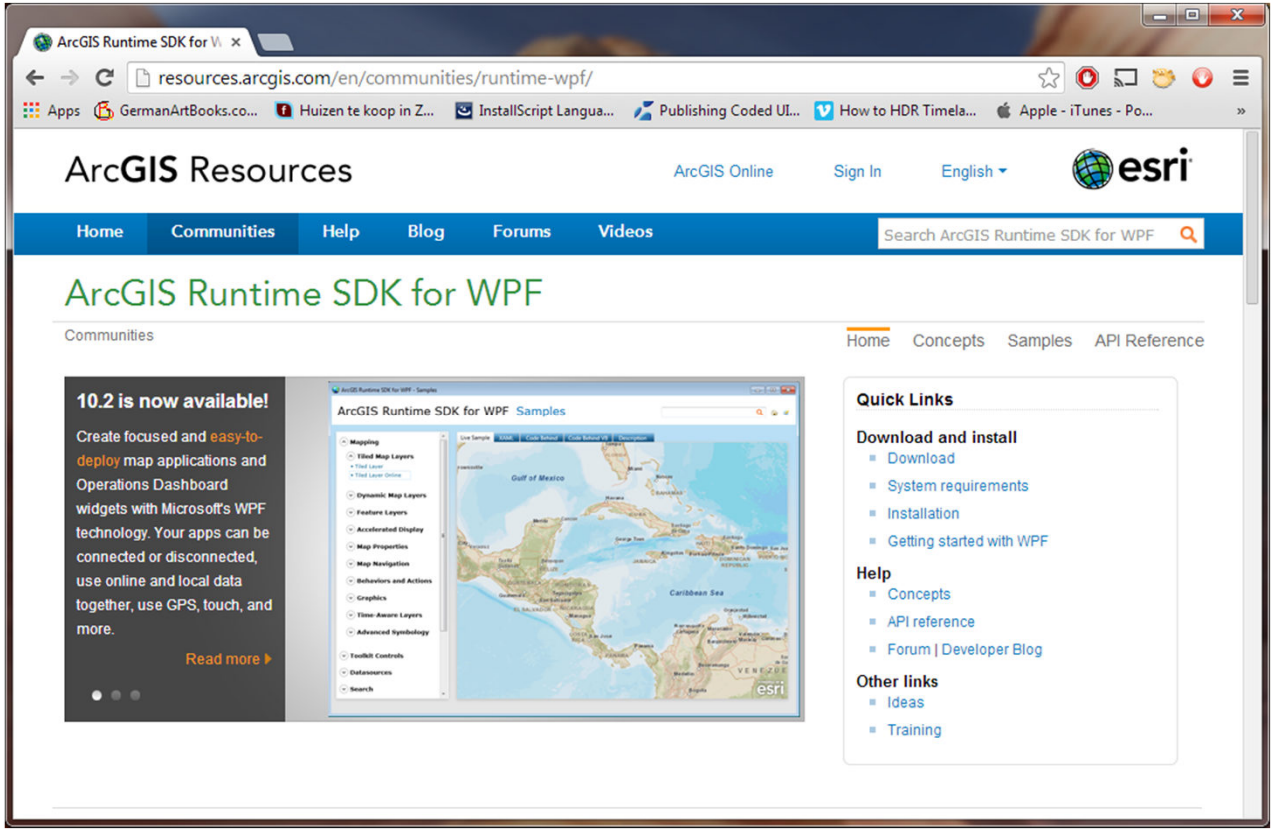


Migrate to Runtime using MEF

Working wit Python scripts

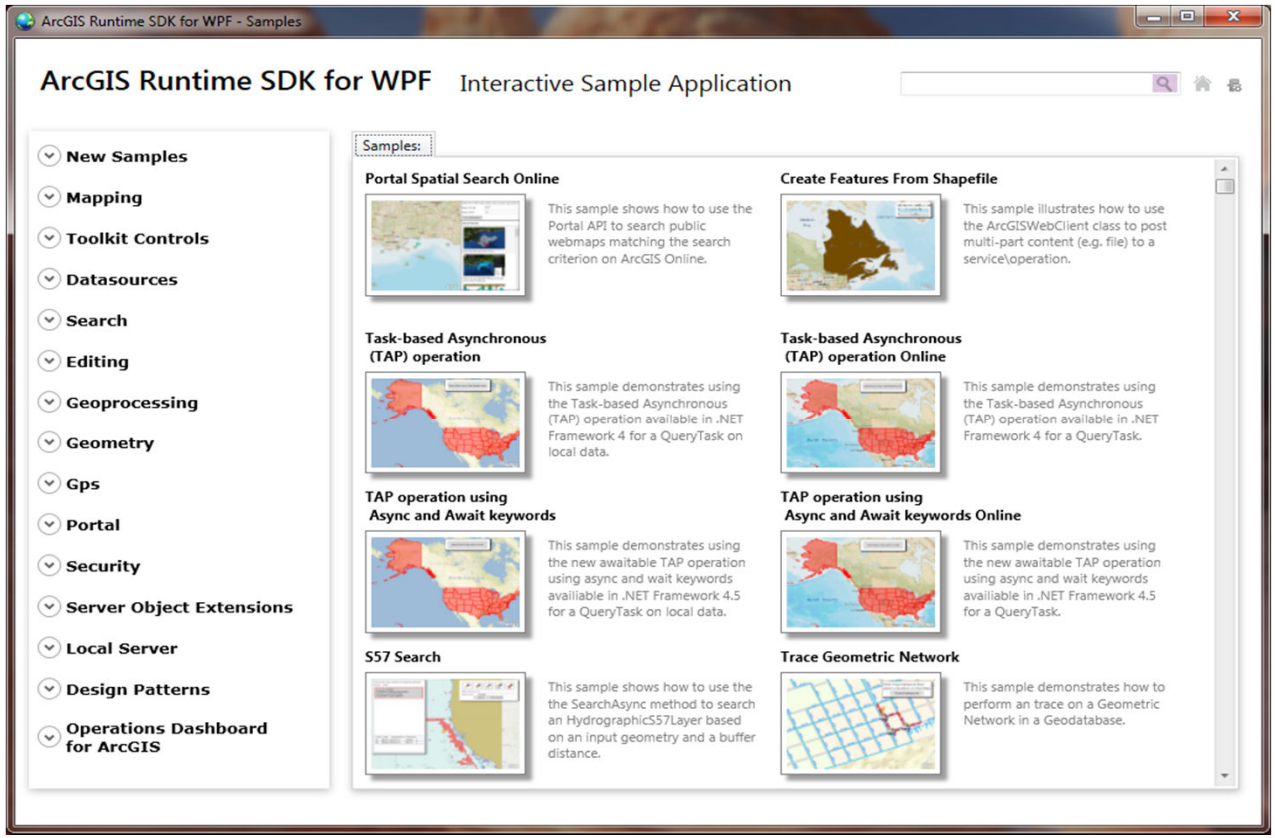
Tools

Getting started

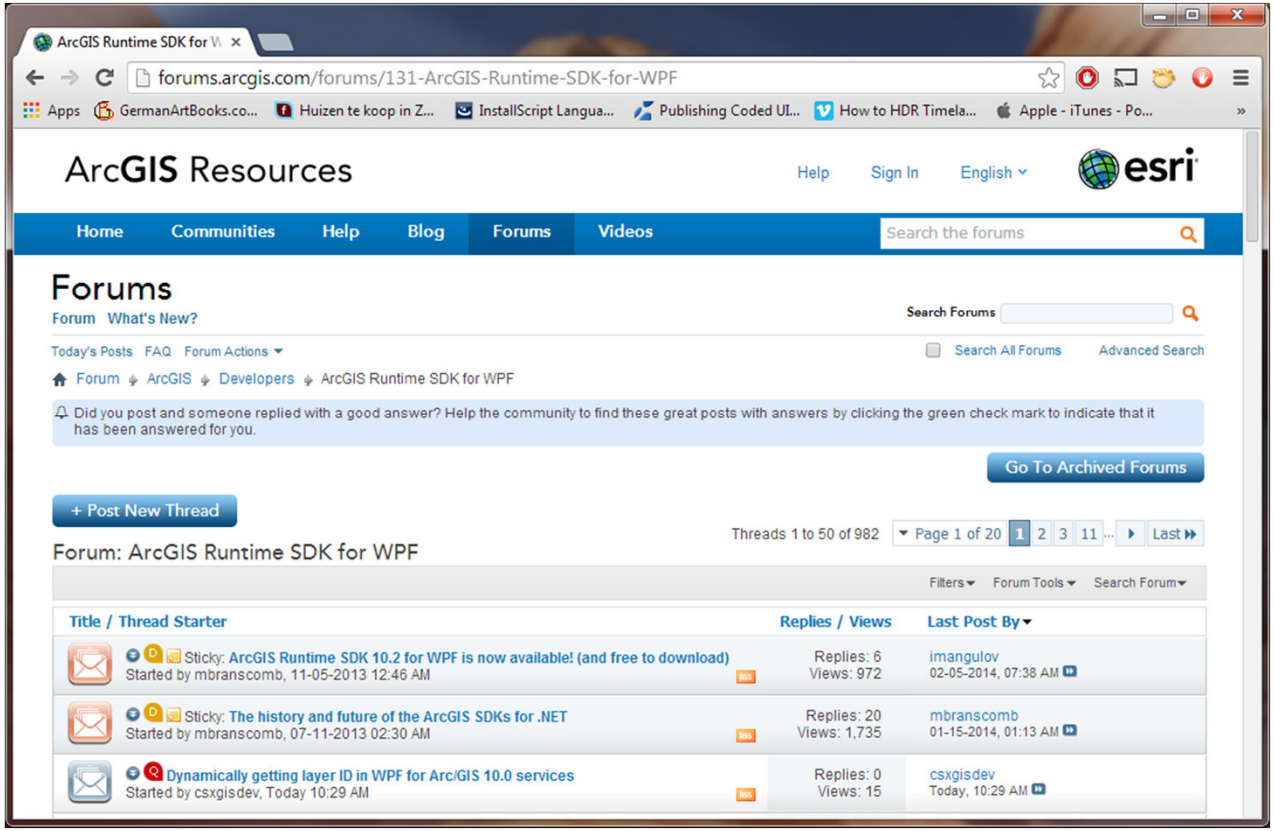


http://resources.arcgis.com/en/communities/runtime-wpf/

Get the FREE! SDK

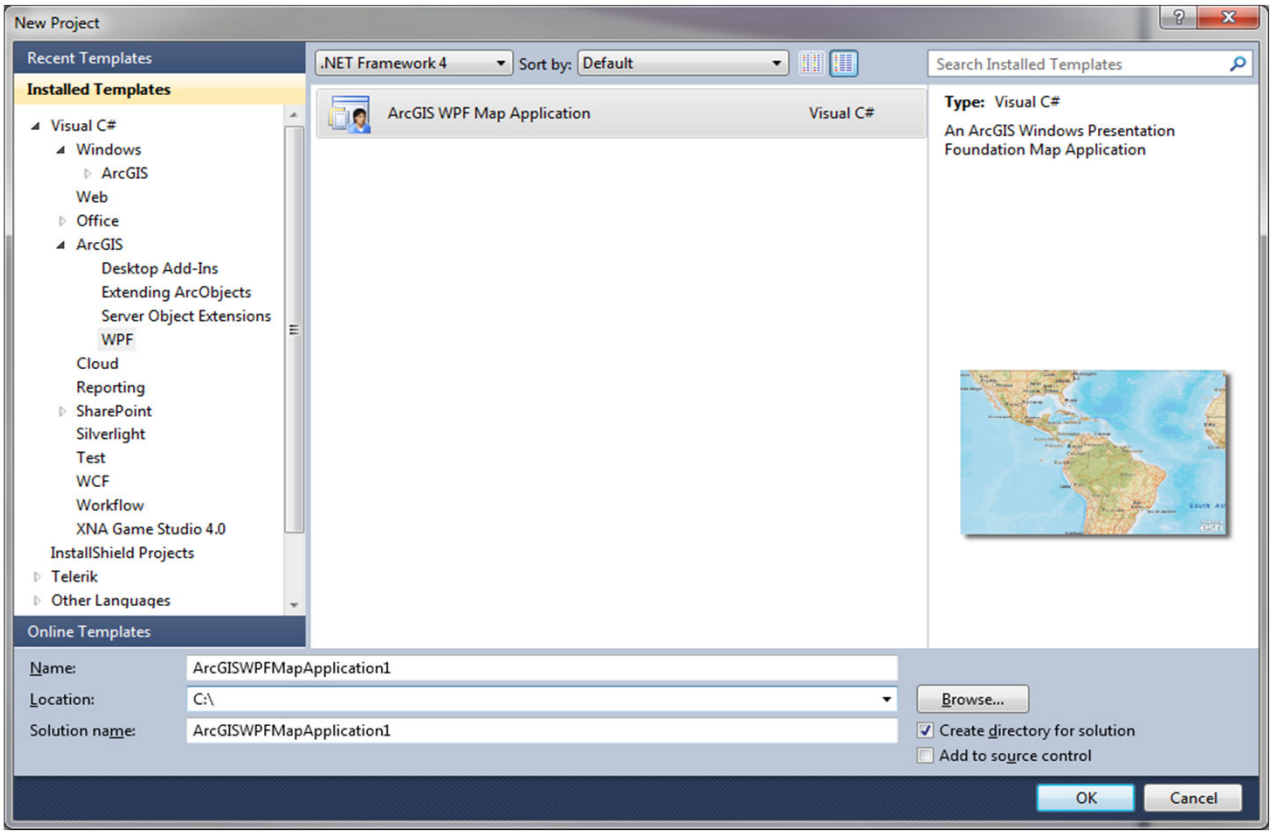


Runtime sample application



http://forums.arcgis.com/forums/131-ArcGIS-Runtime-SDK-for-WPF

Runtime forum



Visual Studio template

Future of Runtime

Contact

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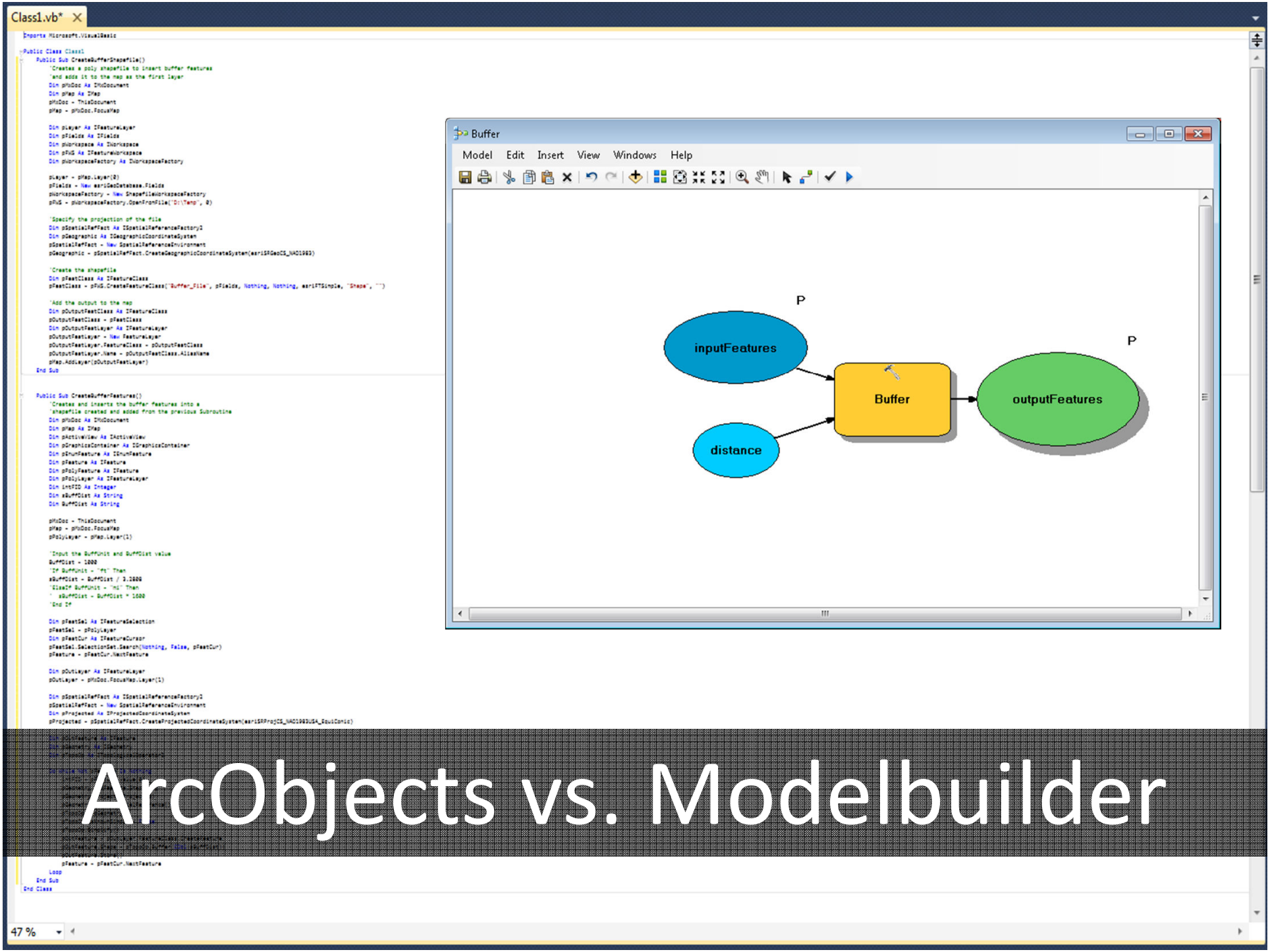
Image source: http://www.mathieuweiler.com/theendRKP.html

Additional supporting slides



ArcObjects vs. Modelbuilder

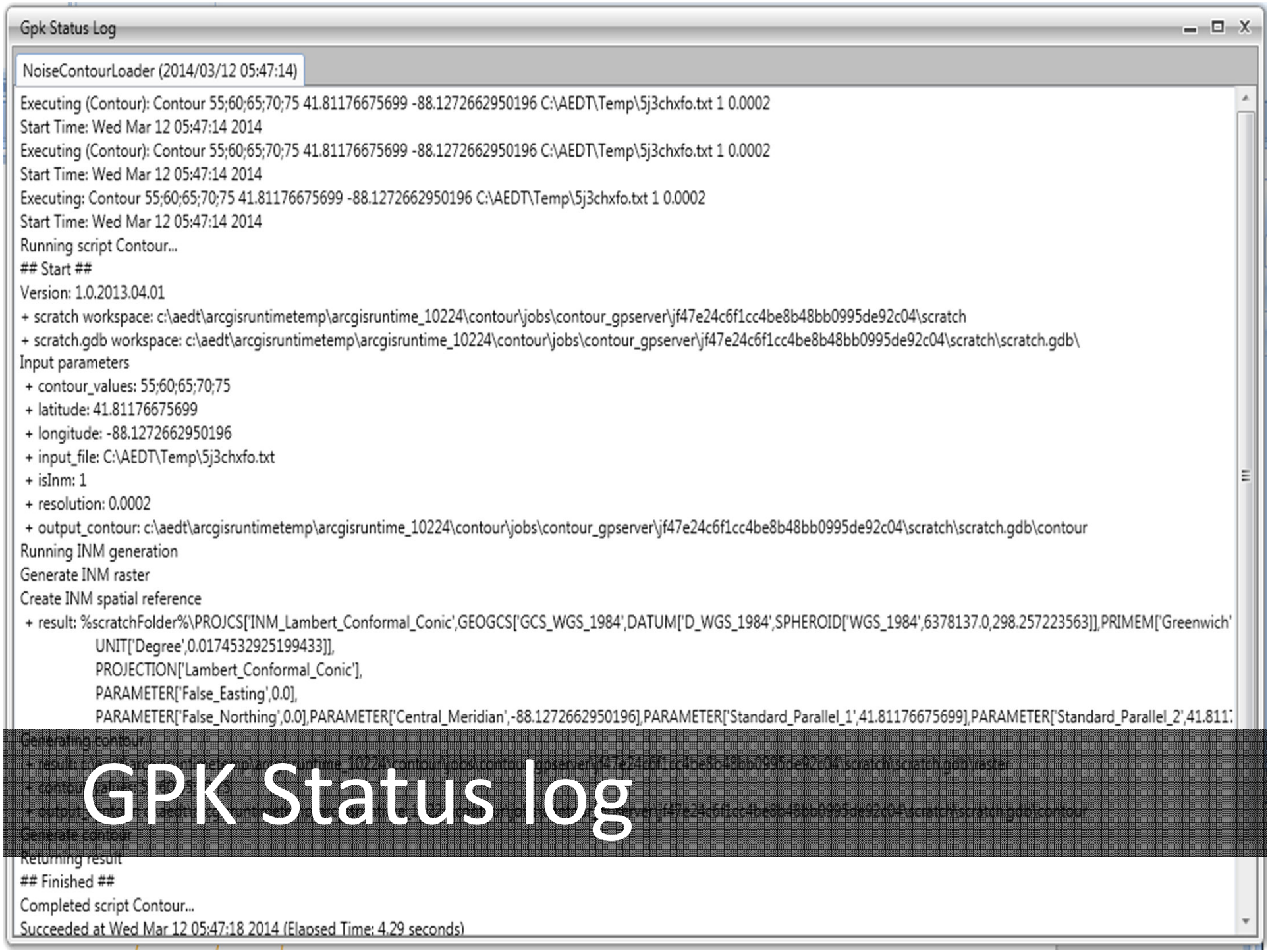
Fiddler

- http://www.telerik.com/fiddler

PyScripter

- https://code.google.com/p/pyscripter/

Tools



GPK Status log