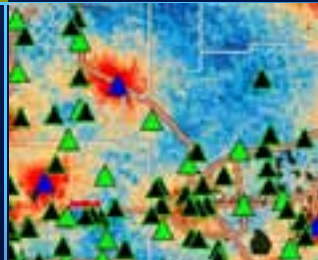
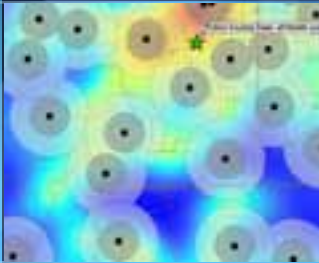


Community & Demographic Analysis

Build Your Applications & Web Sites

Bob Hazelton
Garry Burgess
Tony Howser

Thursday, 7/14/2011 10:15AM



What is Business Analyst Server?

- **A set of data, analysis methods & application development toolkits**
 - **To Create Applications**
 - Support a large number of users from a central location
 - No individual desktop applications or GIS knowledge.
 - Web, mobile, *anywhere*
 - **Applications, dashboards, analyses, and models**
 - Shared across the organization
 - Provide a common platform
 - decision-making and planning

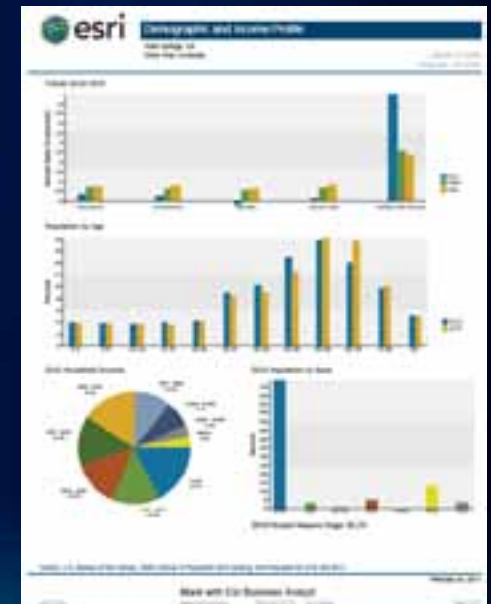
Business Analyst API

Quickly incorporate in your web or mobile application

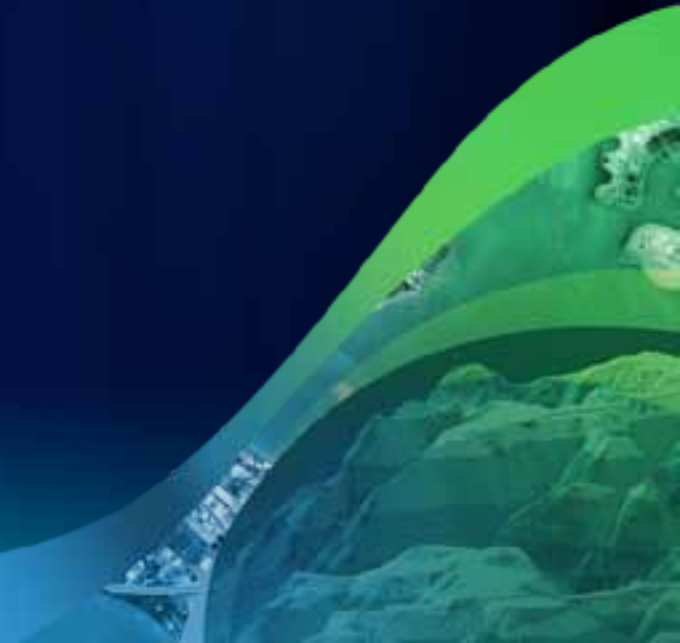
- People, Places, Business
- Suitability Maps \ Reports
- Maintained by Esri



- Population
- Households
- Age
- Income
- Family Size
- Education
- Net Worth
- Consumer Spending
- Lifestyles
- Market Segmentation
- Businesses
- Products & Services Use
- Supply & Demand



Main



<http://resources.arcgis.com> ➔ Business Analyst ➔

Business Analyst Online APIs
Business Analyst Server

A Flexible & Self-Sustaining Solution

configure

leverage

disseminate



ArcGIS 10 — A Complete System

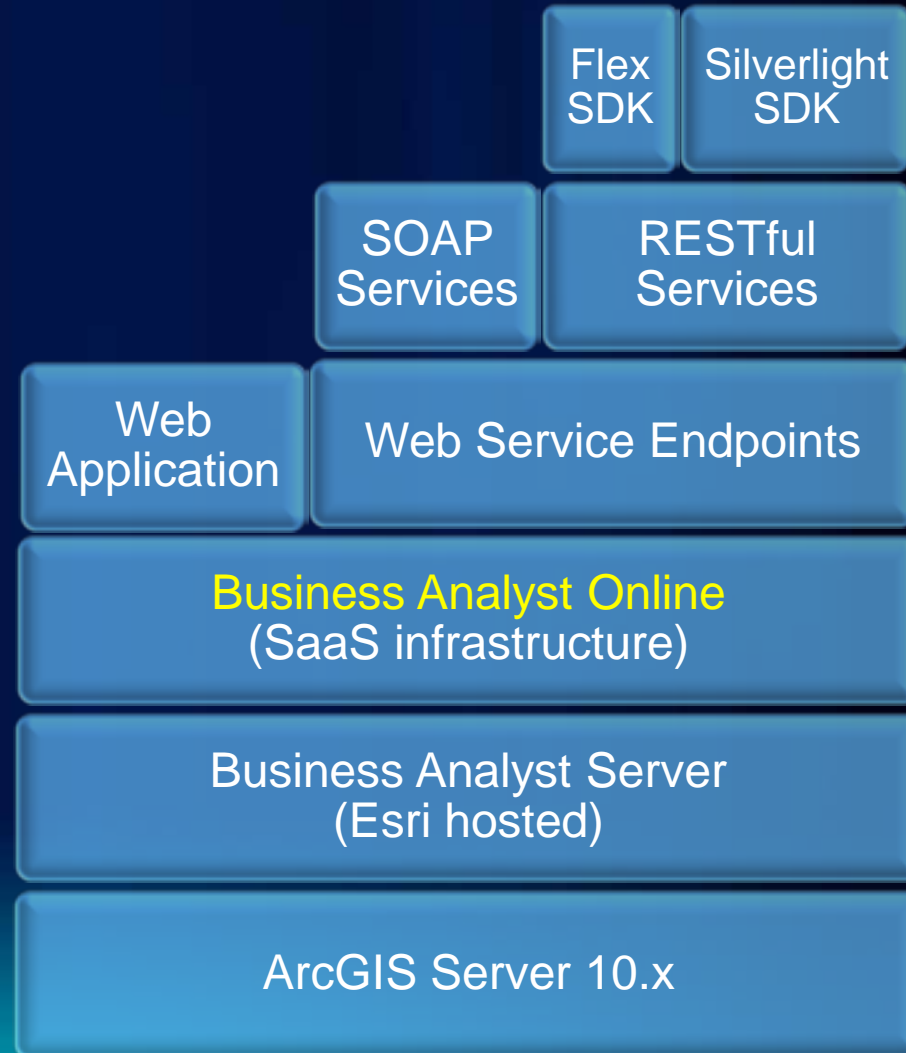
**Easier
More Powerful
and Everywhere**



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Business Analyst Online APIs
Business Analyst Server

Business Analyst API Technology Stack



Common Input Parameters

Study Locations/Areas

- Standard Geography/Administrative Boundary Areas
- Locations Defined by Address or Point Coordinates ([demo](#))
- Areas Defined by Custom Geometries

Desired Summarization/Analysis Variables
or Report Template IDs

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Business Analyst Online APIs
Business Analyst Server

Common Output

Excel

	A	B	C	D	E
1	id	attribute1	attribute2	attribute3	
2	1	MyTextAttribute1	12345.6789	http://www.esri.com	
3	2	MyTextAttribute2	12345.6789	http://www.arcgis.com	
4					

```
<?xml version="1.0" ?>
<records>
  <record id="1" attribute1="MyTextAttribute1" attribute2="12345.67890" attribute3="http://www.esri.com" />
  <record id="2" attribute1="MyTextAttribute2" attribute2="12345.67890" attribute3="http://www.arcgis.com" />
</records>
```

XML

```
{
  "records": [
    {
      "id": "1",
      "attribute1": "MyTextAttribute1",
      "attribute2": 12345.67890,
      "attribute3": "http://www.esri.com"
    },
    {
      "id": "2",
      "attribute1": "MyTextAttribute2",
      "attribute2": 12345.67890,
      "attribute3": "http://www.arcgis.com"
    }
  ]
}
```

JSON

PDF



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Business Analyst Online APIs
Business Analyst Server

Examples

JSON

Query the average and median owner-occupied home values; and the number of owner-occupied, renter-occupied, and vacant-housing units for each of the 48 contiguous states. ([g](#))

```
http://baopapi.esri.com/rest/maps/ThematicQuery/execute?
geoLevelID=US.States&
f=json&
outFields=NAME,ID,AVGVAL_CY,MEDVAL_CY,OWNER_CY,RENTER_CY,VACANT_CY&
geometry={"xmin":-125,"ymin":25,"xmax":-43,"ymax":50}&geometryType=esriGeometryEnvelope&InSR=4326&
Token=w1fe8G0HpRr_Lc2ECWhYJi7oYK8YGnJWwYXrN9udlAtYPWSTZ2xPNbso16ufF67FbcM=&
```

XML

Develop a reusable Web App to quickly and easily [analyze potential electric vehicle charging station locations](#)

PDF

Create a Retail Marketplace Potential Report for a custom-defined Study Area

Applied Workflows with NO CODE!

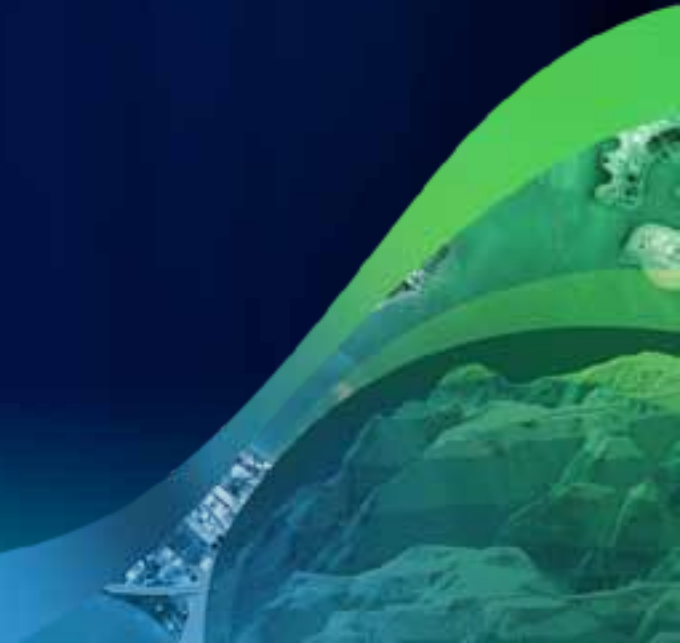
Conclusion

- Gain new and additional insights into your communities, constituencies
- Leverage quality data that would be prohibitively expensive to accumulate, process, update, and maintain.
- Use standards-based Web services to tap into the cloud and create and enhance your workflows to attract investment into your communities.

S^3



Simple Sophisticated Services



What are we doing?

Designing new BA Server API methods

- **Simplify the naming and syntax**
 - **Make it obvious and easy to understand**
- **Reduce the number of required parameters**
 - **Provide one parameter and receive a result**
- **Anticipate and offer smart defaults**

What does it look like?

A standard web address

- `http://baoapi.esri.com/GetFacts?`
- `StudyAreas="380 New York St. Redlands, CA 92373"`

What occurs

1. Address is evaluated & geocoded
2. A default, 1-mile ring around the point
3. Ring area retrieves variables in the default FactPack
4. Results are returned in a simple format

What does it look like?

Let's get fancy

- <http://baoapi.esri.com/GetFacts?>
- StudyAreas="380 New York St. Redlands, CA 92373"
- **RunComparison=true** (+token)

What occurs?

1. Address is evaluated & geocoded
2. A default, 1-mile ring around the point
3. Ring area retrieves variables in the default FactPack
4. The same variables are retrieved for multiple areas
 1. Zip code, county, state, country
5. Results are returned in a simple format

What does it look like today?

```
http://baoapi.esri.com/rest/report/BenchmarkReport?  
BenchmarkOptions=useMedianValues&  
FieldSortType=sortNone&  
StandardReportOptions={"ReportFormat":"PDF"}&  
Summarizations=AVGVAL_CY;AVGHINC_CY;AVGHHSZ_CY&  
TradeAreas=[{"StdLayer":{"ID":"US.Zip5","GeographyIDs":["92373"]}},  
{"StdLayer":{"ID":"US.Counties","GeographyIDs":["06071"]}},  
{"StdLayer":{"ID":"US.States","GeographyIDs":["06"]}},  
{"StdLayer":{"ID":"US.WholeUSA","GeographyIDs":["01"]}}]&  
f=pjson&  
Token=ABC123
```

Business Analyst Server 10.1

- **External Feature class/ data support**
 - Reference other GDB's or tables with spatial data
 - Leverage BA Server methods without copying data
- **BA Application Template**
 - Customizable, Localizable, Extensible, Skin-able
 - User Interface Component Library

Business Analyst Application Template



Create Site

Organize

① ② ③ ~~④~~

Block Group ▼ for Current map extent ▼

☒ *

\$50,000	11/11/2012	\$75,000
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\$27,000	11/10/2012	\$35,000
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□ *

28 11/11/2011 4:0



☒ *Yes*

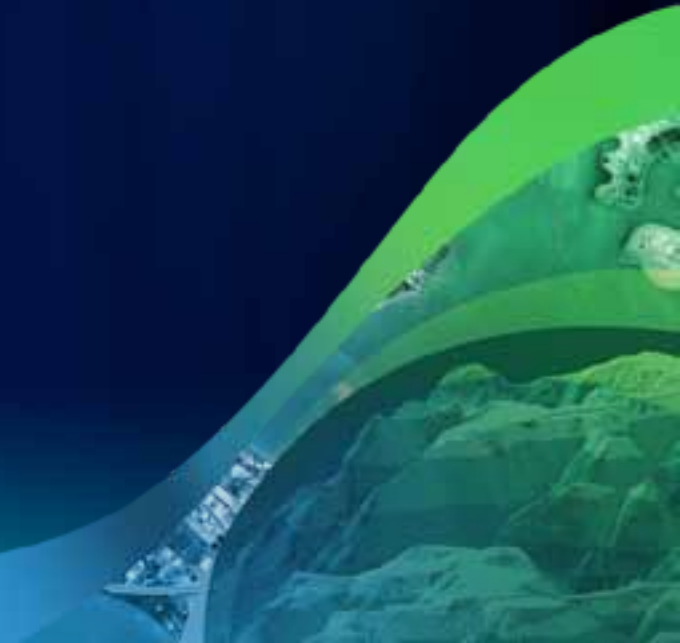
[View Results Table](#)

42 out of 78 Block Groups match your criteria

More Maps...

San Francisco

Wrap-up



Other Ways to Reach Us



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Commercial
Solutions Island**



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