# **ESRI Business Analyst Server 9.3.1**

## How to add a custom BDS layer in Business Analyst Server



Version 1.0

December, 2009

## **Table of Contents**

INTRODUCTION	3
CREATING A CUSTOM BDS LAYER IN BUSINESS ANALYST DESKTOP	4
UPLOADING A CUSTOM BDS LAYER TO BUSINESS ANALYST SERVER	12

## Introduction

ESRI Business Analyst Server is a server-based business solution that integrates business logic with Geographic Information System (GIS). It allows users to perform analyses, create reports and publish business data and workflows across their organization. It also allows you to bring in custom data to perform analyses and create reports using custom datasets.

A custom BDS layer can be used with the ESRI Business Analyst Suite of products.

This document uses BGCRIMe.dbf file as a working example to illustrate steps needed to create a custom BDS layer in Business Analyst Desktop and then to upload it to Business Analyst Server.

#### Creating a Custom BDS Layer in Business Analyst Desktop

Business Analyst allows you to create custom BDS (Business Analyst Datasource) layers in Business Analyst Desktop. Once a BDS layer is created, it is brought into Business Analyst Server dataset for use in creation of custom report templates. As an example, the BGCRIMe.dbf table will be used to add a custom BDS layer in the Business Analyst Server dataset. This table contains information on crimes registered in block groups.

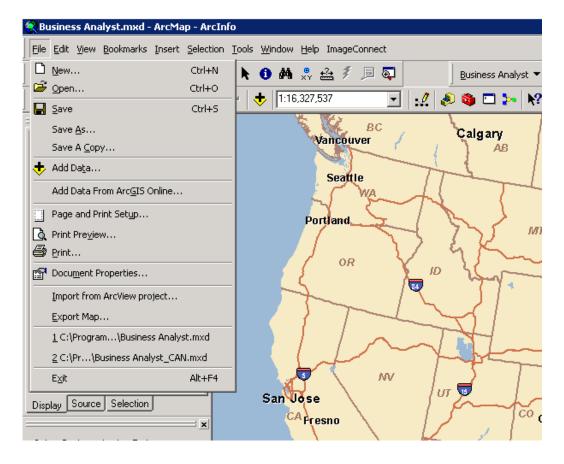
For this example, a new BDS layer, which contains block group boundaries with BGCRIMe.dbf attributes as an integrated dataset, will be created. The BDS file is an XML format file.

We will create a new BDS layer in the Business Analyst output folder for custom data:

#### C:\My Output Data\Projects\Default Project\Custom Analysis Layer

This location will store the original BGCRIMe.dbf file. Business Analyst data files can be stored in any location in the file system. For the purpose of the following directions, storing them in this location will show the options for easily transferring the new BDS data layer to the Business Analyst Server dataset.

In ArcGIS Desktop, open ArcMap. To add the BGCRIMe.dbf file to the current map, click File in the toolbar and then click Add Data.

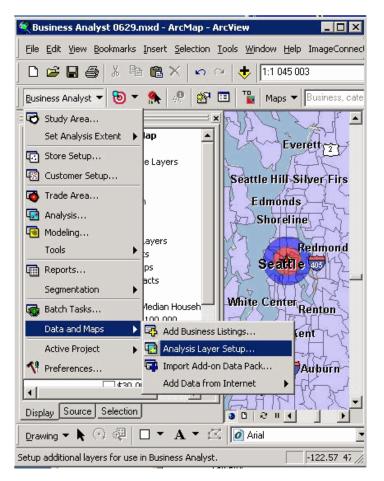


In the Add Data dialog box, browse to the location of the BGCRIMe.dbf file. Highlight the BGCRIMe.dbf file and click Add.

Add Data	l i										×
Look in:		Custom /	Analysis L	ayer	•	ĉ	3	) 🔛	8-6- 5-5- 8-6-	<b>##</b> 88	
1 BGCRI	[Me.db	f									
Name:										Add	
Show of t	type:	Datase	is and Lay	vers (*.lyr)				•		Cancel	

Ensure that the standard Business Analyst Block Groups layer is available on the map. If not, add this layer to the map using the Add Data.

From the Business Analyst menu, select **Data and Maps**. Highlight and click **Analysis Layer Setup**.



The Analysis Layer Setup Wizard dialog box appears. Click the **Create new Business Analyst datasource (BDS)** radio button and click Browse.

Analysis Layer Setup Wizard		? ×
Business Analyst Datasource (BDS) allows you to import, join, and customize your own data for use in analysis and reports.	The Analysis Layer Setup Wizard allows you to configure your own data for use in Business Analyst. Create new Business Analyst datasource (BDS) Open and edit an existing Business Analyst datasource:	
Help	<< Back Next >> Can	cel

Browse to the location of the BGCRIMe.dbf file, type "CrimeBg" in the File name text box and click Save.

Select BDS data	source				? ×
Save jn:	Custom Analy	sis Layer	•	+ 🗈 💣 🎟	
My Recent Documents Desktop					
My Documents My Computer					
My Network Places	File <u>n</u> ame: Save as <u>type</u> :	CrimeBg BDS (*.bds)		•	<u>S</u> ave Cancel

You are returned to the previous dialog box with Next enabled.

Click Next.

Analysis Layer Setup Wizard		? ×
Analysis Layer Setup Wizard	The Analysis Layer Setup Wizard allows you to configure your own data for use in Business Analyst.  Create new Business Analyst datasource (BDS)  C:\My Output Data\Custom Analysis Layer\ C Open and edit an existing Business Analyst datasource:	? ×
Help	<< Back Next >> Can	cel

Next, select Block Groups layer in the first drop-down list and select ID in the second dropdown list. Ensure that **Store relative path names** radio button is checked. Click Add.

	Block Groups	
	✓ Only show existing BDS layers Select the base boundary layer unique ID:	
	ID	
	┌ Include your own data attributes	
and to be an an and the second		Add
		Move Up
ou can modify an existing BDS r add your own attributes, which an be housed in a boundary		/love Down
yer or table. The ID fields of ach must match. Using sales gures by ZIP Code as an		Remove
xample, your ZIP Code IDs must atch the base ZIP Code layer )s.	Define how paths should be stored in the new data	source:
	Store full path names     Store relative path names	

The Add Additional Table dialog box appears. Select BGCRIMe in the first drop-down list. Then select BLOCKGGROUP in the second drop-down list and click OK.

dd Additional Table	? ×
Select the layer or table that :	should be added to BDS layer:
BGCRIMe	•
Which field uniquely identifies	the feature in main laver?
BLOCKGROUP	् च

You are returned to the previous dialog box. The BLOCKGROUP field in the BGCRIMe.dbf table contains an ID of the associated Block Group. Using the ID field from the Block Group layer and the BLOCKGROUP field from the BGCRIMe.dbf table, the BGCRIMe.dbf table is connected to the Block Groups as a new custom layer.

Click Next.

existing BDS layers e boundary layer unique ID:
e boundaru lauer unique ID:
s boaridary rayor arridae ib.
own data attributes
BLOCKGROUP Add
Move Up
Move Dor
Remove
ths should be stored in the new datasource:
ath names

Next, add fields to the CrimeBg dataset. CrimeBg dataset will contain fields from the Block Group and BGCRIMe tables.

Analysis Layer Setup Wizard Select the fields you would like to add to the new Busine the left lists all available fields. Select one or more fields the BDS.		
Block Groups:ID         Block Groups:NAME         Block Groups:State Name         Block Groups:State Abbreviation         Block Groups:2009 Total Population         Block Groups:2009 Household Population         Block Groups:2009 Family Population         Block Groups:2009 Group Quarters Populatio         Block Groups:2009 Total Households         Block Groups:2009 Total Households         Block Groups:2009 Average Household Size         Block Groups:2009 Average Family Size         Block Groups:2009 Per Capita Income         Search and Filter	Use Saved Variable List:	
Filter: Match Case	Save Manage	Cancel

In this example, select Total Population, Household Population, and Family Population from the Block Group table.

⊞ Block Groups		Block Groups: 2009 Total Population
E BGCRIMe		Block Groups: 2009 Household Population Block Groups: 2009 Family Population
BLOCKGROUP		Block Groups:2009 Family Population
COUNTYNAME		>>
STATENAME		
AREA		
LATITUDE		< _
LONGITUDE		
POPCY		< <u> </u>
CRMCYTOTC		- Use Saved Variable List:
CRMCYPERC	-	
Search and Filter		<none></none>
	ENLIG	Save Manage
Filter:	Match <u>C</u> ase	Manaye

Also, select 10 fields with crime data from the BGCRIMe table. Once all the fields are selected, click the Next button.

Analysis Layer Setup Wizard		? ×
Analysis Layer Setup Wizard Select the fields you would like to add to the new Business the left lists all available fields. Select one or more fields in the BDS.		? ×
Search and Filter       Filter:       Match Case	<pre>&lt; none &gt; Save Manage</pre>	-
Help	<	

Click Next.

	Field Name:	Field Alias:
	Calculated Fields:	
No. of Street and Street and Street		New
		Save
stom variables can be created ng your own data or any of the indard variables included in		Remove
ndard variables included in siness Analyst.		Clear
		Edit
		Import

Click Finish.

Variable	Aggregation	Weight	Apportionment Method	Category	
2009 Total Population	Sum	<none></none>	Population 2009	2009 De	
2009 Household Population	Sum	<none></none>	Population 2009	2009 De	
2009 Family Population	Sum	<none></none>	Population 2009	2009 De	
CRMCYTOTC	Sum	<none></none>	Population 2009		
CRMCYPERC	Sum	<none></none>	Population 2009		
CRMCYMURD	Sum	<none></none>	Population 2009		
CRMCYRAPE	Sum	<none></none>	Population 2009		
CRMCYROBB	Sum	<none></none>	Population 2009		
CRMCYASST	Sum	<none></none>	Population 2009		
CRMCYPROC	Sum	<none></none>	Population 2009		
CRMCYBURG	Sum	<none></none>	Population 2009		
	~	1.	D 1.11 0000	- 34	

When the BDS layer is created, the following dialog box appears.

Business Analyst		×
CrimeBg.bds was created sur	ccessfully. Add	it to map?

Click Yes to add the layer to the map. Another CrimeBg.bdr file is created under the same folder. It contains additional information about the layer.

The created BDS layer is intended for use in the Business Analyst Desktop. In order to use it in the Business Analyst Server, you need to upload it on a server using the Upload/Download Projects feature of the Business Analyst Desktop.

The difference between Business Analyst Desktop and Server BDS layers is the specification of the BDS workspace path for a BDS layer. In a desktop BDS layer this path usually looks as follows:

#### <WS PathName="C:\Program Files\ArcGIS\Business Analyst\Data\BDS" CLSID="{9E80DD48-E672-4978-A5A1-C03F9C9B29BC}" />

When a desktop BDS layer is uploaded to a Business Analyst Server, its workspace path is automatically corrected.

### Uploading a Custom BDS Layer to Business Analyst Server

The Upload/Download Projects feature allows you to import the BDS layer from Business Analyst Desktop to Business Analyst Server.

To upload a project to Business Analyst Server, follow these steps:

In ArcGIS Desktop, open ArcCatalog.

- 1. Navigate to the Business Analyst Data folder.
- 2. Right-click on the project containing the CrimeBg BDS layer. A dialog box appears showing the Uploaded Project.
- 3. Select the project.
- Use the Select Business Analyst Server drop-down list to select the URL. Note that a tooltip is provided to construct this URL. If this dialog box has been used prior, the drop-down list shows the previous connections.
- Next, you can select the workspace, check Use default report format check box to set the default and create a new project.

Upload Project dialog box will look similar to the one below.

Upload Project 🔉 🔰
Select the items to Upload:
EV P EV M Custom Analysis Layer EV M CrimeBg.bds
Select Business Analyst Server:
http://localhost/ArcGIS/Services/DefaultMap/MapServer/BASer  Connect
Select Workspace:
Default Workspace      Use default report format:
🔽 Adobe Reader
MS Excel
I MS Word
C Add items to an existing project
Colorado Tutorial Project
☑ Overwrite existing server items
Create new project
Default Project 2
Help Upload Cancel

6. Click Upload.

The custom CrimeBG.bds layer will be uploaded to the UserData folder in the Business Analyst Server dataset. Its workspace path is corrected to "..\Data\BDS" location. This layer will be available for use as a summarization layer for creating custom report templates.