

WebFOCUS

WebFOCUS Adapter for Geographic Information Systems Getting Started Release 8.2 Version 02

December 13, 2017

Active Technologies, EDA, EDA/SQL, FIDEL, FOCUS, Information Builders, the Information Builders logo, iWay, iWay Software, Parlay, PC/FOCUS, RStat, Table Talk, Web390, WebFOCUS, WebFOCUS Active Technologies, and WebFOCUS Magnify are registered trademarks, and DataMigrator and Hyperstage are trademarks of Information Builders, Inc.

Adobe, the Adobe logo, Acrobat, Adobe Reader, Flash, Adobe Flash Builder, Flex, and PostScript are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Due to the nature of this material, this document refers to numerous hardware and software products by their trademarks. In most, if not all cases, these designations are claimed as trademarks or registered trademarks by their respective companies. It is not this publisher's intent to use any of these names generically. The reader is therefore cautioned to investigate all claimed trademark rights before using any of these names other than to refer to the product described.

Copyright © 2017, by Information Builders, Inc. and iWay Software. All rights reserved. Patent Pending. This manual, or parts thereof, may not be reproduced in any form without the written permission of Information Builders, Inc.

Contents

Pref	face	. 5
	Documentation Conventions	5
	Related Publications	6
	Customer Support	6
	Information You Should Have	7
	User Feedback	8
	Information Builders Consulting and Training	. 8
1 . Ir	ntroducing the WebFOCUS Adapter for Geographic Information Systems	. 9
	Understanding Key Features and Benefits	9
	Functional Overview	.10
	Architecture of a Geographic Business Intelligence Solution	. 12
	Adobe Flex (Client)	. 12
	WebFOCUS Adapter for Geographic Information Systems (Middle Tier)	.13
	ArcGIS Server	13
	WebFOCUS Reporting Server	13
	Architecture Diagram	. 14
2. R	equirements and Prerequisites	15
	Compatibility Matrix	.15
	Hardware Requirements	. 17
	Software Requirements	17
	Prerequisites for WebFOCUS GIS Viewer for Flex	. 18
	Map Document Requirements	18
	Data Storage Requirements	. 18
	Permission Requirements	.19
	Map Service Requirements	.19
	Crossdomain.xml File Requirements	. 42
3. B	uilding a Sample Application	.43
	Sample Application Overview	. 43
	Defining WebFOCUS Reporting Procedures	. 54
	Defining Synthetic Map Services	100
	Defining Man Services	102

Defining Symbols	
Understanding Replaceable Parameters	
Defining Custom JavaScript	
Launching the WebFOCUS GIS Viewer for Fl	ex
Flushing Tables	
4. Tips and Usage Considerations	
Creating Rollovers	
5. Additional Resources	
Reference Documentation	
ESRI Resources	

This documentation describes how to get started with the WebFOCUS Adapter for Geographic Information Systems: ESRI[®] ArcGIS[®] Server and ArcGIS Flex[®] API. It is intended for new users who are developing a Geographic Business Intelligence Solution (GBIS) that combines the real-time enterprise business intelligence and reporting capabilities of WebFOCUS with ESRI ArcGIS Server.

How This Manual Is Organized

	Chapter/Appendix	Contents
1	Introducing the WebFOCUS Adapter for Geographic Information Systems	Provides a brief introduction to the WebFOCUS Adapter for Geographic Information Systems. In addition, an overview of the Geographic Business Intelligence Solution (GBIS) components that are associated with this solution is included.
2	Requirements and Prerequisites	Provides a summary of the requirements and prerequisites for the WebFOCUS Adapter for Geographic Information Systems.
3	Building a Sample Application	Provides a detailed tutorial for the WebFOCUS Adapter for Geographic Information Systems that walks the user through the steps that are required to build a geographic retail application.
4	Tips and Usage Considerations	Provides a selection of tips and usage considerations for the WebFOCUS Adapter for Geographic Information Systems.
5	Additional Resources	Provides additional resources for the WebFOCUS Adapter for Geographic Information Systems.

This manual includes the following chapters:

Documentation Conventions

The following table describes the documentation conventions that are used in this manual.

Convention	Description
THIS TYPEFACE	Denotes syntax that you must enter exactly as shown.
or	
this typeface	
this typeface	Represents a placeholder (or variable), a cross-reference, or an important term.
underscore	Indicates a default setting.
Key + Key	Indicates keys that you must press simultaneously.
{}	Indicates two or three choices. Type one of them, not the braces.
[]	Indicates a group of optional parameters. None is required, but you may select one of them. Type only the parameter in the brackets, not the brackets.
	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis ().
· · ·	Indicates that there are (or could be) intervening or additional commands.

Related Publications

Visit our Technical Content Library at *http://documentation.informationbuilders.com*. You can also contact the Publications Order Department at (800) 969-4636.

Customer Support

Do you have any questions about this product?

Join the Focal Point community. Focal Point is our online developer center and more than a message board. It is an interactive network of more than 3,000 developers from almost every profession and industry, collaborating on solutions and sharing tips and techniques. Access Focal Point at http://forums.informationbuilders.com/eve/forums.

You can also access support services electronically, 24 hours a day, with InfoResponse Online. InfoResponse Online is accessible through our website, *http://www.informationbuilders.com*. It connects you to the tracking system and known-problem database at the Information Builders support center. Registered users can open, update, and view the status of cases in the tracking system and read descriptions of reported software issues. New users can register immediately for this service. The technical support section of *www.informationbuilders.com* also provides usage techniques, diagnostic tips, and answers to frequently asked questions.

Call Information Builders Customer Support Services (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available Monday through Friday between 8:00 a.m. and 8:00 p.m. EST to address all your questions. Information Builders consultants can also give you general guidance regarding product capabilities. Please be ready to provide your six-digit site code number (*xxxx.xx*) when you call.

To learn about the full range of available support services, ask your Information Builders representative about InfoResponse Online, or call (800) 969-INFO.

Information You Should Have

To help our consultants answer your questions effectively, be prepared to provide the following information when you call:

- □ Your six-digit site code (*xxxx.xx*).
- □ Your WebFOCUS configuration:
 - □ The front-end software you are using, including vendor and release.
 - □ The communications protocol (for example, TCP/IP or HLLAPI), including vendor and release.
 - □ The software release.
 - ❑ Your server version and release. You can find this information using the Version option in the Web Console.
- ❑ The stored procedure (preferably with line numbers) or SQL statements being used in server access.

- □ The Master File and Access File.
- □ The exact nature of the problem:
 - Are the results or the format incorrect? Are the text or calculations missing or misplaced?
 - Provide the error message and return code, if applicable.
 - □ Is this related to any other problem?
- Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?
- ❑ What release of the operating system are you using? Has it, your security system, communications protocol, or front-end software changed?
- Is this problem reproducible? If so, how?
- Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing just the code to access the data source?
- Do you have a trace file?
- ☐ How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

User Feedback

In an effort to produce effective documentation, the Technical Content Management staff welcomes your opinions regarding this document. You can contact us through our website, *http://documentation.informationbuilders.com/connections.asp*.

Thank you, in advance, for your comments.

Information Builders Consulting and Training

Interested in training? Information Builders Education Department offers a wide variety of training courses for this and other Information Builders products.

For information on course descriptions, locations, and dates, or to register for classes, visit our website (*http://education.informationbuilders.com*) or call (800) 969-INFO to speak to an Education Representative.

Chapter

Introducing the WebFOCUS Adapter for Geographic Information Systems

This section provides a brief introduction to the WebFOCUS Adapter for Geographic Information Systems. In addition, an overview of the Geographic Business Intelligence Solution (GBIS) components that are associated with this solution is included.

In this chapter:

- Understanding Key Features and Benefits
- Functional Overview
- □ Architecture of a Geographic Business Intelligence Solution

Understanding Key Features and Benefits

WebFOCUS Adapter for Geographic Information Systems provides a Geographic Business Intelligence Solution (GBIS) that combines the real-time enterprise business intelligence and reporting capabilities of WebFOCUS with ESRI ArcGIS Server. This solution allows users throughout the extended enterprise to rapidly and intuitively analyze real-time information with a spatial component by presenting business intelligence information in the context of physical location.

A GBIS improves decision-making and responsiveness while extending the reach of GIS to address a wider range of business applications.

Key features of this adapter include:

- **G** Support for native integration with more than 85 data sources.
- □ Integration with map services hosted by ArcGIS Server. ArcGIS Server is a Geographic Information System (GIS) software package made by ESRI that is used to deploy weboriented spatial data services.
- ESRI Configuration Utility, a graphical interface to configure and edit XML definition files. The adapter parses these XML files and uses the information provided to generate JavaScript objects and methods that are returned to the web browser.
- WebFOCUS GIS Viewer for Flex, a mapping interface that provides a bi-directional display of information. It integrates the mapping capabilities of ESRI ArcGIS Server with WebFOCUS. WebFOCUS GIS Viewer for Flex is developed using the Adobe Flex version 3.5 development environment and the ArcGIS API for Flex version 1.5.

Several industries where WebFOCUS Adapter for Geographic Information Systems can be used to develop a GBIS include:

- **Retail.** Determining the ideal location for a new store, product launch, or marketing campaign.
- **Insurance.** Analyzing environmental damage by county or municipality.
- **Law Enforcement.** Viewing similar crimes in a city to detect key patterns.

Functional Overview

The Geographic Business Intelligence Solution (GBIS) that is enabled by the integration between WebFOCUS and ESRI ArcGIS Server allows three types of reports to be generated by using the mapping interface:

Report

🛯 Мар

Identify



Using a mapping interface, users can create a WHERE clause using a specific location to drilldown to a WebFOCUS report, as shown in the following image.



Map reports are generated by drilling down from a map, as shown in the following image.



This allows users to visualize results from a WebFOCUS report on a map by using color, size, picture, and shape to define the data represented on the map.

Charge Charge Description FAILURE TO APPEAR FOR TRAFFIC 46.2-938 2004/04/09 SUMMONS 19.2-REVOCATION OF SUSPENDED 2004/08/06 3061F SENTENCE AND PROBATION 19.2-REVOCATION OF SUSPENDED 2004/08/06 306|F SENTENCE AND PROBATION REVOCATION OF SUSPENDED 2004/08/06 19.2-306 M SENTENCE AND PROBATION 19.2-REVOCATION OF SUSPENDED 2004/08/06 306|F SENTENCE AND PROBATION POSSESSION OF CONTROLLED 2005/04/28 18.2-2501F SUBSTANCES

The identify reports are single location based queries, as shown in the following image.

Once the user clicks on a specific location, the map receives information from the WebFOCUS Reporting Server to display the information in a contextual window on the map. This functionality can include callouts, rollovers, and so on.

Architecture of a Geographic Business Intelligence Solution

This section outlines the key components that are combined to form the architecture of a Geographic Business Intelligence Solution (GBIS). These key components include:

- □ Adobe Flex (Client)
- U WebFOCUS Adapter for Geographic Information Systems (Middle Tier)
- ArcGIS Server
- WebFOCUS Reporting Server

Adobe Flex (Client)

For this Geographic Business Intelligence Solution (GBIS), Adobe Flex is used as the client. Adobe Flex is an open source framework used to develop rich Internet applications. When a user issues a request using a web browser, this request is passed to Adobe Flex to create a selection request for the ArcGIS Server. Adobe Flex is also used to process responses from the ArcGIS Server to pass to the middle tier. All symbol generating and map rendering processes occur in this framework.

WebFOCUS Adapter for Geographic Information Systems (Middle Tier)

WebFOCUS Adapter for Geographic Information Systems is the middle tier (gateway) to issue requests to the WebFOCUS Reporting Server and receive responses from the Reporting Server. All responses from the WebFOCUS Reporting Server are processed to the web or to the client.

ArcGIS Server

ArcGIS Server is a Geographic Information System (GIS) software package developed by ESRI that is used to deploy web-oriented spatial data services. It allows users to publish maps on to the web. ArcGIS Server processes any user selections that are made on the map. The map consists of various data layers for the corresponding perspectives that are being used (for example, streets, neighborhoods, arrests, and so on). Based on the location of these layers, ArcGIS Server performs spatial filtering and returns a response to the Client. The response is formatted as JSON formatted text. As a result, the Client uses this JSON formatted text to make further requests.

For more information on ArcGIS Server, visit the following website:

http://resources.arcgis.com/en/help/getting-started/articles/026n00000007000000.htm

WebFOCUS Reporting Server

The WebFOCUS Reporting Server is the Reporting Server used by WebFOCUS. WebFOCUS reports are triggered using a location-based query, which is passed to the WebFOCUS Reporting Server and then served as stylized reports.

WebFOCUS is the most secure and flexible business intelligence solution meeting all the reporting needs of the extended enterprise, ranging from analysts, to power users, and to the widest deployments for hundreds of thousands of users. The empowerment provided by WebFOCUS for organizations seeking to leverage all their data by accessing it all, from legacy to data warehouse, is unmatched.

Architecture Diagram

The diagram in this section illustrates the workflow between the key components that are combined to form the architecture of a Geographic Business Intelligence Solution (GBIS). The line connectors between the components can be uni-directional or bi-directional. In addition, the function calls for the middle tier are clearly stated.





Requirements and Prerequisites

This section provides a summary of the requirements and prerequisites for the WebFOCUS Adapter for Geographic Information Systems.

In this chapter:

- Compatibility Matrix
- Hardware Requirements
- Software Requirements
- Prerequisites for WebFOCUS GIS Viewer for Flex

Compatibility Matrix

The following table specifies WebFOCUS and ArcGIS Server compatibility information.

WebFOCUS Releases	Configurations
Release 8.2 Version 02	
ArcGIS Server 10.1	
ArcGIS Server 10.2	
ArcGIS Server 10.3	
ArcGIS Server 10.4	
Release 8.2 Version 01M	
ArcGIS Server 10.1	
ArcGIS Server 10.2	
Release 8.0 Version 04	
ArcIMS 9.3 with JavaScript Viewer	
ArcGIS Server 9.3.1 with JavaScript Viewer	Non-pooled map services only

WebFOCUS Releases	Configurations
ArcGIS Server 9.3.1 with Flex Map Viewer	Pooled map services only
ArcGIS Server 10.0 with JavaScript Viewer	Non-pooled map services only
ArcGIS Server 10.0 with Flex Map Viewer	Pooled map services only
ArcGIS Server 10.1 with Flex Map Viewer	Pooled map services only
Note: Does not work with multiple coordinate systems.	
Release 8.0 Version 01	
ArcIMS 9.3 with JavaScript Viewer	

·	
ArcGIS Server 9.3.1 with JavaScript Viewer	Non-pooled map services only
ArcGIS Server 9.3.1 with Flex Map Viewer	Pooled map services only
ArcGIS Server 10.0 with JavaScript Viewer	Non-pooled map services only
ArcGIS Server 10.0 with Flex Map Viewer	Pooled map services only
ArcGIS Server 10.1 with Flex Map Viewer	Pooled map services only
Note: Does not work with multiple coordinate systems.	

WebFOCUS 8M

ArcIMS 9.3 with JavaScript Viewer	
ArcGIS Server 9.3.1 with JavaScript Viewer	Non-pooled map services only
ArcGIS Server 9.3.1 with Flex Map Viewer	Pooled map services only
ArcGIS Server 10.0 with Flex Map Viewer	Pooled map services only

Release 7.7 Version 03

ArcIMS 9.3 with JavaScript Viewer	
ArcGIS Server 9.3.1 with JavaScript Viewer	Non-pooled map services only

WebFOCUS Releases	Configurations
ArcGIS Server 9.3.1 with Flex Map Viewer	Pooled map services only
ArcGIS Server 10.0 with Flex Map Viewer	Pooled map services only
Release 7.7 Version 02	
ArcIMS 9.3 with JavaScript Viewer	
ArcGIS Server 9.3.1 with JavaScript Viewer	Non-pooled map services only
ArcGIS Server 9.3.1 with Flex Map Viewer	Pooled map services only
Release 7.6 Version 11	
ArcIMS 9.3 with JavaScript Viewer	
Release 7.6 Version 10 (HotFix)	
ArcGIS Server 10.0 with JavaScript Viewer	Non-pooled map services only

Hardware Requirements

Hardware requirements for the WebFOCUS Adapter for Geographic Information Systems are the same as required by WebFOCUS.

For more information, see the *WebFOCUS Installation and Configuration* documentation related to this topic for your platform.

Software Requirements

Ensure that the following components are installed and available before using the WebFOCUS Adapter for Geographic Information Systems:

- ArcGIS Server Version 9.3 or higher.
- WebFOCUS Client
- U WebFOCUS Reporting Server

Prerequisites for WebFOCUS GIS Viewer for Flex

This section provides the prerequisites for WebFOCUS GIS Viewer for Flex.



WebFOCUS GIS Viewer for Flex requires:

A pooled map service published on ArcGIS Server version 9.3 or higher.

Note: Map services published on ArcIMS will not work.

- A geometry service published on ArcGIS Server version 9.3 or higher.
- Adobe Flash Player

Map Document Requirements

You must first create a map document on your local file system. This map document will not be available to client applications until the map service is published.

Data Storage Requirements

The data needs to be stored in a way that the Server Object Container (SOC) machine for ArcGIS Server can access it. What this means is that when a map document is published as a service, both the map document and all its layers in the map document needs to be accessible by the SOC machine.

Use Universal System Convention (UNC) paths instead of mapped paths for network data. If the data is stored in a local hard drive, then use a mapped path. If your shape files are stored in a shared directory, then use UNC paths so that the SOC machine can access it.

Permission Requirements

In order for the SOC machine to access the data, grant SOC account (ArcGISSOC) permissions to use the data. This is the SOC user account you specified during ArcGIS Server Post Install. Grant the account read access to your data.

Map Service Requirements

You can create a map service using one of the following options:

Option 1: Use the ArcGIS Web Manager Console to create a pooled map service.

Option 2: Use ArcCatalog to connect to the ArcGIS Server and create the map service.

To grant permissions, add your logon for the system where ArcCatalog is installed as a user to the agsadmin group in the ArcGIS Server system.

Procedure: How to Publish a Map Service Using the ArcGIS Server Manager Console

To publish a map service using the ArcGIS Server Manager Console:

1. From the Windows Start menu, select *All Programs*, *ArcGIS*, *ArcGIS* Server for the Java *Platform*, and then click *ArcGIS* Server *Manager*.

Login to ArcGIS M	lanager
User name:	Example: 'username' or 'DOMAIN\username'
Password:	
ArcGIS Server:	ibiflex

The Login to ArcGIS Manager dialog opens.

2. Log in to the ArcGIS Server Manager Console using the account that you configured after installation.

Log In

3. Click Log In.

The ArcGIS Server Manager Console Home page opens.

MARC ArcGIS SERVER MANAG	ER Logged in as 'Ibi\MD12538' Friday, October 22, 2010 10:35:20 AM
Home	ArcGIS Manager
Home	With ArcGIS Server, you can share your geographic information in many ways.
Settings	What do you want to do?
Services O Applications O GIS Server O	Publish a map, globe or other GIS resource as a service
Security 0	Create a web application
	Manage my GIS Server
	Manage Security
GIS Server Status	
Name: ibiflex	
Status: Online Started: Oct 19, 2010 - 03:22:53 PM	
Messages: <u>view log</u>	

4. Click Publish a map, globe or other GIS resource as a service.

The Publish: General page opens.

Home 🔍	Publish: General	
Home	Choose the GIS Resource you would like to publish	
Settings	Resource Type: Map	
	Resource: Browse	
Services O	Name:	
Applications O	Observe the folder to sublish to	
GIS Server O	Choose the folder to publish to	
Security O		
	O New Folder	
	Next > Cancel	

- 5. From the Resource Type drop-down list, select *Map*.
- 6. Specify the path to the map document (.mxd) in the Resource field, or click the *Browse* button to navigate to the location on your file system.

- 7. In the *Choose the folder to publish to* section, select an existing folder or specify a new folder name in the New Folder field.
- 8. Click Next.

The Publish: Capabilities page opens.

Home	•	Publish: Capabilities
Home		Choose capabilities you would like to enable
Settings		Mapping (always enabled) Feature Access Mable Data Access
Services	0	Mobile Data Access
Applications	0	
GIS Server	0	Network Analysis
Security	0	WFS WFS
		🔲 wcs
		GeoData Access
		Geoprocessing
		< Previous Next > Cancel

9. Accept the default values and click Next.

The Publish: Summary page opens.

Home 🗸	Publish: Summary	
Home	Below is a summary o	f the new service you are about to publish
Settings	Resource:	C:\ibi\apps\hpd\hpd_cfs.mxd
	Resource Type:	Map
	Folder Location:	'ibiflex' (root folder)
Services O	Capabilities:	KML
Applications O		
GIS Server O	< Previous	Finish Cancel
Security O		

10. Click Finish.

Procedure: How to Use ArcCatalog to Connect to the ArcGIS Server and Create the Map Service

To use ArcCatalog to connect to the ArcGIS Server and create the map service:

1. From the Windows Start menu, select All Programs, ArcGIS, and then click ArcCatalog.

The ArcCatalog opens, as shown in the following image.



You must first create a connection to the ArcGIS Server.

2. Expand the GIS Servers node and double-click Add ArcGIS Server.

The Add ArcGIS Server wizard opens, as shown in the following image.

Add ArcGIS Server	? 🔀
	This wizard guides you through the process of making a connection to an ArcGIS Server. You can either create a user connection to use GIS services, or an administrative connection to manage GIS services. What would you like to do? What would you like to do? Use GIS Services Manage GIS Services
	< Back Next > Cancel

3. Select the Manage GIS Services option and click Next.

The General pane opens.

General		? 🗙
Server URL:	http://ibiflex:8j399/arcgis/services	
	http://www.myserver.com/arcgis/services	
Host Name:	ibiflex	
	< Back Finish (Cancel

4. Enter the server URL using the following format:

http://<ArcGIS ServerHost Name>:<port number>/arcgis/services

This is the URL on which the map services are displayed. By default, ArcGIS Server listens on port 8399.

5. Enter the host name.

Typically, this is the ArcGIS Server host name.

6. Click Finish.



The new connection is added to the ArcCatalog, as shown in the following image.

You are now ready to create a map service.

7. Right-click the newly created ArcGIS Server connection in the ArcCatalog and select *Add New Service* from the context menu, as shown in the following image.

Add GIS Service		? 🛛
	This wizard lets you define and configure a new s Name: Type: Map Service Description: Restart this service automatically whe	enever ArcGIS Server restarts
	< E	Back Next > Cancel

The Add GIS Service wizard opens, as shown in the following image.

- 8. Enter a name for the new map service in the Name field.
- 9. From the Type drop-down list, select *Map Service*.
- 10. Click Next.

The following pane opens, prompting you to specify the map document (.mxd), output directory, and cache directory.

Add GIS Service	? 🔀
	ا حما
Map Document:	
Data Frame: Active Data Frame Chang	je
_ Specify output directory	
Directory: c: \arcgisserver \arcgisoutput	-
Virtual Directory: http://ibiflex:8399/arcgis/server/arcgisoutput	
Supported Image Return Type: MIME + URL	
- Sperify rache directory	
Server Cache	_
Directory: C: \arcgisserver \arcgiscache	
c Back Mays >	Cancel
< Back Next >	Cancel

- 11. Specify the path to the map document (.mxd) in the Map Document field, or click the *Browse* button to navigate to the location on your file system.
- 12. Accept the default values in the Specify output directory section, or specify your own custom values.
- 13. Select an available cache directory from the Server Cache Directory drop-down list.
- 14. Click Next.

The following pane opens.

Add GIS Service				? 🔀
Mapping (always enabled)	Enable Web Acc URL: http://b Operations allowed Map	iflex:8399/arcgis/ser : Query is capability>	vices/hpd_analysis/M₂ I Data	
		< Back	Next > 🔓 C	ancel

15. Accept the default values and click Next.

The following pane opens.

Add GIS Service		? 🛛
Pooling This service should be: (Pooled - Used repeatedly by many clients. Not pooled - Used by a single client and disposed of	f after use.	
Minimum number of instances: 1 Maximum number of instances: 2	_	
Timeouts		
The maximum time a client can use a service:	600 sec	conds
The maximum time a client will wait to get a service:	60 sec	conds
The maximum time an idle instance can be kept running:	1800 sec	conds
	< Back Next >	Cancel

16. Accept the default values and click Next.

The following pane opens.

Add GIS Service	? 🛛
Services run in processes on the host machines.	
Run instances of this configuration:	_
In a separate process for each instance (high isolation)	•
Instances per process (low isolation only):	
Recycling shuts down the process and restarts it at regular intervals to help maintain performance and stability.	
Recycle this configuration every: 24 hour(s).	
Starting at: 12:00 AM	
< Back Next >	Cancel

17. Accept the default values and click Next.

The Summary pane opens, as shown in the following image.

d GIS	Service
Yo	u are about to create the following ArcGIS Service:
F	Seneral: Name: hpd_analysis Type: MapServer Description: Startup Type: Automatic Parameters: FilePath: \\biflex\bi\apps\hpd\hpd_cfs.mxd OutputDir: c:\arcgisserver\arcgisoutput VirtualOutputDir: http://biflex:8399/arcgis/server/arcgisoutput SupportedImageReturnTypes: URL SOMCacheDir: c:\arcgisserver\arcgiscache MaxRecordCount: 500 MaxBufferCount: 100 MaxImageWidth: 2048 IsCached: false CacheOnDemand: false IgnoreCache: false
Do	o you want to start this service right now? O No, I will start the service later on. O Yes, start the service right now.
	< Back Finish Can

18. Click Finish.

You have successfully created a new map service using ArcCatalog.

You are now ready to create the map cache.

Procedure: How to Create the Map Cache

To create the map cache:

1. Right-click the newly created map service and select *Service Properties* from the context menu, as shown in the following image.

Contents F	Preview Metadata			
Name		Туре		Status
Geome	etry	Geometry Service		Started
🖾 anna		Map Service		Started
Cmpd		Map Service		Started
FLEA		Map Service		Started
🖾 hpd		Map Service		Started
Image: A standard background b	nalysis	Map Service		Started
hpt >	< <u>D</u> elete			Started
Þ	Start			
	Stop			
1	Pause			
	<u>R</u> estart			
	Enable Web Access			
	Disa <u>b</u> le Web Access			
	Create Layer			
	Zoom to Nearest Ca	the Resolution		
	Service Properties			
đ	Properties			
_				

The Map Service Properties dialog opens	The	Map S	Service	Properties	dialog	opens
---	-----	-------	---------	------------	--------	-------

ArcGIS Server - Map Service Properties				
General Parameters Capabilities Pooling Processes Caching				
Name:	hpd_cfs			
Type:	Map Service			
Description:				
Restart this service automatically whenever ArcGIS Server restarts				
	OK	Cancel Apply		

2. Click the Caching tab.

ArcGIS Server - Map Service Properties				
General Parameters Capabilities Pooling Processes Caching				
Draw this map service: C Dynamic © Using tile Tiling Scheme Load tiling scheme from Scales:	Add Delete Suggest	ou will define below Origin (x, y) in map X: -126725700 Y: 179559600 Image Settings: Tile Format: Compression: Height: Width: Dots per inch:	Cri Del units: PNG8 • 512 • 512 • 96	eate Tiles ete Cache pixels pixels DPI
		Smooth line and (anti-aliasing)	label edges	
Create tiles on demand Advanced Options				
Allow dients to cache tiles locally Cache directory: c:\arcgisserver\arcgiscache				
OK Cancel Apply				

- 3. In the Draw this map service section, select the Using tiles from a cache that you will define below option.
- 4. Click Suggest in the Scales section if you are unsure of how to create the tile.

The Scale Levels dialog opens.

Scale Levels	
How many scale levels do you want?	6
	OK Cancel

- 5. Enter a number in the field, which represents the number of zoom levels that will be allowed in the map navigation.
- 6. Click OK.
| General Parameters Capabilities Pooling Processes Caching |
|---|
| Draw this map service: Dynamically from the data Ising tiles from a cache that you will define below Delete Cache Delete Cache Tiling Scheme Origin (x, y) in map units: Load tiling scheme from Scales: Add Tile Format: Tile Format: PEG PNG8 PNG8 PNG8 PNG8 PNG8 PNG8 PNG24 PNG32 Pixels Dots per inch: 96 DPI Smooth line and label edges (anti-aliasing) (anti-aliasing) |
| Create tiles on demand Advanced Options Allow clients to cache tiles locally Cache directory: c:\arcgisserver\arcgiscache ✓ |

You are returned to the Caching tab of the Map Service Properties dialog.

7. In the Image Settings section, select JPEG from the Tile Format drop-down list.

The JPEG format produces small tiles and will reduce the required disk space to store the cache. In addition, clients can also load the tiles faster.

Note: This step assumes that you are not going to overlay this cache on another service. For overlay services, such as road and boundary networks, it is recommended to use the PNG8 format instead.

8. Click OK.

The Create Tiles dialog opens.

Create	Tiles 🛛
1	The cache has been enabled but there are no tiles in it yet. You can create tiles now or return to this caching dialog later and click Update Tiles.
	Do you want to create tiles now?
	Yes No

9. Click Yes.

The Manage M	lap Server	Cache Tiles	dialog opens.	as shown in	the following image.
					0 0

P	Manage Map Server Cache Tiles	×
	Host	A
	loffex .	
	Map Server	
	hpd_cfs	-
	Data Frame	
	Layers	-
	Input Layers	
	StoreFronts	
	✓ Stations	
	✓ Freeways	
	✓ MajorRoads	
	✓ Roads	
	✓ LakeHouston	
	✓ Houston	
	✓ HarrisCounty	
	I. I	
	Select Ali Unselect Ali	Add Value
	Indate Extent (optional)	
	abrana musine (abranua)	
	Тор	
	14032274.930965	
	Left Right	
	2884465.920300 Settem 33118.	2.887764
	B000000 13634363 450053	Class
	1 100-002-00000	Clear
	Scales	
	2 100000	
	☑ 500000	
	250000	
	125000	
	₩ 64000	
	☑ 32000	
	Select All Unselect All	Add Value
	Locate Mode	
	Recreate all Tiles	
	Number of MaoServer Instances (optional)	
		2
	Antishasing (Smoothes edges of labels and lines for improved display quality) (optional)	
		<u> </u>
	OK Cancel Environments.	Show Help >>

- 10. Ensure that Recreate All Tiles is selected from the Update Mode drop down list.
- 11. Click OK to create the tiles.

The following dialog opens, which shows the progress of the tile creation process.

Manage Map Server Cache Tiles	×
Executing Manage Map Server Cache Tiles	Cancel
8%	<< Details
Close this dialog when completed successfully	
Start Time: Fri Oct 22 12:57:19 2010 Restarting configuration	^
Configuration Restarted successfully. Updating Cache Deleting previous tiles Caching new tiles	

12. Wait until the process has finished.

Once the process has finished, you must clear the REST cache.

Procedure: How to Clear the REST Cache

To clear the REST cache:

1. Log on to the ArcGIS REST API Admin console using the following URL:

http://<ArcGISServer>:8399/arcgis/rest/admin/

The following login page opens.

ArcGIS REST API Admin							
ArcGIS Server REST API Admin Login							
Login							
Admin User Name	arcgismanager						
Password	•••••						
Login							
Login							

2. Enter a valid admin user name and password, and then click Login.

The REST API Admin page opens, as shown in the following image.

ArcGIS REST API Admin
Admin
REST API Admin Operations:
 <u>Clear Cache Options</u> <u>Services Directory Options</u> <u>Generate Admin Token</u>

3. Click the Clear Cache Options hyperlink.

The Clear Cache Options page opens.

ArcGIS REST API Admin
Admin
Clear Cache Options <u>Clear Cache Now</u> (Clears the REST API Cache.)
Clear Cache Policy Settings
O Manual
Cache never expires automatically. Manually clear the cache from the admin console.
Scheduled
Schedule the cache to be cleared daily at 00:00 hours (24 hour clock - HH:MM)
Image:
Clear the cache periodically every 60 minutes
Apply Settings

4. Click the Clear Cache Now hyperlink.

You can also select the *Scheduled* or *Periodic* option to clear the cache automatically based on the time values that you specify.

Crossdomain.xml File Requirements

Before you deploy WebFOCUS GIS Viewer for Flex, ensure that the crossdomain.xml file is included in the root directory where ArcGIS Server is installed. This file is used to access data from a different server other than the one hosting the WebFOCUS GIS Viewer for Flex application.

For security reasons, Flex cannot access data other than where the .swf file for the deployed application is located. This is the primary reason why the crossdomain.xml file must reside on the remote server (ArcGIS Server). As a result, permissions are granted to Flash to access the services on the remote server. The crossdomain.xml file must be structured, as shown in the following example:

```
<?xml version="1.0"?>
<!DOCTYPE cross-domain-policy SYSTEM "http://www.adobe.com/xml/dtds/cross-
domain-policy.dtd">
<cross-domain-policy.dtd">
<cross-domain-policy>
<site-control permitted-cross-domain-policies="all"/>
<allow-access-from domain="*"/>
</cross-domain-policy>
</cross-domain-policy>
</cross-domain-policy>
```

For more information on how to configure the crossdomain.xml file, see the following web site:

http://resources.arcgis.com/en/help/flex-api/concepts/index.html#/Using_crossdomain_xml/ 017p0000001w000000/



Building a Sample Application

This section provides a detailed tutorial for the WebFOCUS Adapter for Geographic Information Systems that walks the user through the steps that are required to build a geographic retail application.

In this chapter:

- Sample Application Overview
- Defining WebFOCUS Reporting Procedures
- Defining Synthetic Map Services
- Defining Map Services
- Defining Symbols
- Understanding Replaceable Parameters
- Defining Custom JavaScript
- Launching the WebFOCUS GIS Viewer for Flex
- Flushing Tables

Sample Application Overview

The sample application called *Retail Predictives* is packaged in the *orlando.zip* archive. This application is designed to determine predicted sales across specific geographic areas (census blocks) in Orlando, FL, which are identified by Federal Information Processing Standard (FIPS) codes. Each FIPS code identifies:

- Deputation difference (per square mile) between 2000 and 2010
- Median age
- Store count

The following business types are being represented in this sample application:

- Convenience Store
- Department Store

- Electronics Store
- Gas Station
- Grocery Store
- Men's Clothing Store
- Shoe Store
- □ Sporting Goods Store
- Women's Clothing Store

This section describes how to access and begin exploring the functionality of the Retail Predictives sample application.

Procedure: How to Access the Retail Predictives Sample Application

- 1. Unzip the orlando.zip archive to a location on your file system.
- Copy the folder called *orlando* to the following directory of your WebFOCUS installation *drive*:\ibi\apps

where:

drive

Is the location where WebFOCUS is installed.

For example:

drive:\ibi\apps\orlando

- 3. Ensure the WebFOCUS Reporting Server is started.
- 4. Enter the following URL in a web browser:

http://localhost:8080/approot/orlando/retail_sales_v5.htm

The WebFOCUS GIS Viewer for Flex opens and displays the Retail Predictives application, as shown in the following image.



Procedure: How to Use the Available Drill-Down Options for a FIPS Code

		POPULATION	POPULATION		07.0DF	
FIPS	PREDICTED SALES	2000 PER SQ. MILE	SQ. MILE	MEDIAN AGE	COUNT	
120690309022	3,228	1,225.60	626.80	37.70	4	
120690309114	2,500	8,828.40	8,934.00	46.00	6	1
120690313032	2,500	2,097.60	972.80	35.50	8	1
120690313042	1,004	40,187.40	13,780.80	34.90	33	
120950101001	3,184	44,638.50	19,444.50	79.30	15	•
120950102003	2,500	63,222.00	32,889.00	58.00	5	1
120950102004	3,184	78,956.00	59,478.00	33.70	20	
<u>120950106002</u>	3,238	75,670.00	37,100.00	39.80	7	1
120950107011	2,500	4,285.40	4,290.30	55.90	7	1
<u>120950107021</u>	3,238	16,376.50	16,615.90	43.40	7	1
120950108013	1,004	68,864.00	31,190.00	36.50	20	
<u>120950108021</u>	2,500	52,500.50	54,150.20	37.80	13	1
120950109001	1,004	63,144.90	57,744.90	47.40	27	
120950109002	2,500	23,910.60	24,794.70	33.10	7	1
<u>120950113001</u>	3,228	23,717.60	24,870.40	39.00	8	1
<u>120950119021</u>	2,500	8,633.10	7,933.10	39.50	7	1
120950127012	3,260	55,432.80	53,866.80	37.30	12	1
120950128003	2,500	25,480.80	26,550.00	47.30	18	•
120950129002	3,260	88,866.40	91,022.40	33,40	49	
Detailed I	Report	21,793.20	22,271.40	32.60	6	1
Show in I	Map 📐	38,294.10	246.60	30.50	9	1
120950131001	1,004	7,672.00	8,010.00	36,40	20	

1. Click a FIPS code in the right pane, as shown in the following image.

Select one of the following drill-down options from the context menu that is displayed:

Detailed Report

- Show in Map
- 2. Click Detailed Report.

In the right pane, the predicted values for the selected FIPS code are displayed, as shown in the following image.

FIPS	PREDICTED_SALES	MAX SALES	FST SEASON	BUSINESS TYPE	TIME PERIOD
120950129002	3,260	3,362	Summer	Grocery Store	Evening

3. Click Show in Map.

In the left pane, the region that is represented by the selected FIPS code is highlighted in the map, as shown in the following image.



Procedure: How to Generate Reports Using the WebFOCUS Report Widget

1. Click the *WebFOCUS* icon in the left pane, and select *Report* from the context menu, as shown in the following image.



F	Report							-	3
CUS	Name								
2)-		Detaile	d Report				Ν		
		Display	Banks				43		
		Food St	upermarl	ket Cou	int Repor	t			
+		Predicte	ed Sales	of sele	cted Fips				h
	<u>Spatia</u>	Filter							
	Limit	Search A	irea To:	• 2		8	More O	ptions	-
	+		/ .	Ru	n Renort		Clear Selec	tion	

The Report widget opens, as shown in the following image.

The following reports can be generated based on the selection that is made:

- **Detailed Report.** Generates a report that provides predicted values for the selected FIPS code.
- **Display Banks.** Geocodes (address matches bank locations from a WebFOCUS Report and stores the latitude and longitude values in a WebFOCUS table).
- □ Food Supermarket Count Report. Generates a report that provides a count of supermarkets for the selected FIPS code.
- Predicted Sales of selected Fips. Generates a report that provides predicted values for a selected FIPS code based on a value selected from the BUSINESS TYPE drop-down list.

Note: This report is available only when zooming in to the scale of 1:100,000. This is represented as the second mark from the top of the Navigation bar, as shown in the following image.



- 2. Select the type of report you want to generate and select a Spatial Filter (for example, Rectangle).
- 3. Minimize the Report widget.
- 4. Make a map selection using the selected Spatial Filter and return to the Report widget.
- 5. Click Run Report.

				PERCENT			
				OF			
			МАХ	TOTAL		PEAK	TIME
FIPS	BUSTYPE	PREDICTED_SALES	SALES	SALES	SQFT	SEASON	PERIOD
120950102001	Electronics	6,430.00	3,229.00	50.22%	40,000.00	Fall	Afternoon
120950102004	Electronics	3,184.00	3,184.00	100.00%	20,000.00	Fall	Morning
120950102005	Electronics	6,412.00	3,228.00	50.34%	40,000.00	Spring	Morning
120950108021	Electronics	3,075.00	3,075.00	100.00%	20,000.00	Fall	Morning
120950108022	Electronics	6,412.00	3,228.00	50.34%	40,000.00	Winter	Evening
120950109001	Electronics	6,368.00	3,184.00	50.00%	40,000.00	Fall	Evening
120950110001	Electronics	3,184.00	3,184.00	100.00%	20,000.00	Spring	Morning
120950110002	Electronics	3,228.00	3,228.00	100.00%	20,000.00	Winter	Morning
120950111001	Electronics	3,184.00	3,184.00	100.00%	20,000.00	Spring	Afternoon
120950112001	Electronics	3,201.00	3,201.00	100.00%	20,000.00	Spring	Afternoon
120950128001	Electronics	3,184.00	3,184.00	100.00%	20,000.00	Fall	Evening
120950128002	Electronics	3,075.00	3,075.00	100.00%	20,000.00	Fall	Morning
120950128003	Electronics	3,228.00	3,228.00	100.00%	20,000.00	Winter	Morning
120950128004	Electronics	3,184.00	3,184.00	100.00%	20,000.00	Fall	Afternoon
120950129001	Electronics	6,790.00	3,395.00	50.00%	40,000.00	Spring	Morning
120950130012	Electronics	3,228.00	3,228.00	100.00%	20,000.00	Winter	Evening
120950132003	Electronics	3,184.00	3,184.00	100.00%	20,000.00	Fall	Evening
120950162001	Electronics	9,657.00	3,228.00	33.43%	60,000.00	Winter	Morning

For example, the following report provides predicted sales for the Electronics business type category in a selected region.

Procedure: How to Use the WebFOCUS Map Widget

1. Click the *WebFOCUS* icon in the left pane, and select *Map* from the context menu, as shown in the following image.



The Map widget opens, as shown in the following image.

M	lap 🗾 🖂 😒
	X: 550835.2123, Y: 1533201.9265
FOCUS	Name
	Display Blockgroup Chart Predictives
	Color by Predictive Sales
	Add Map Fex Outputs
	Spatial Filter
	Limit Search Area To: 💽 🛃 🎦 🛄 🚳 More Options
	Pup Papaut Class Selection
	Kun Report Clear Selection

The following map options are available:

- **Display Blockgroup Chart Predictives.** Displays charts as popups on the map that are based on selected stores in a region.
- ❑ Color by Predictive Sales. Colors census blocks (FIPS) for predicted values using parameters on the page. Higher values are colored in red and the lowest values are colored in green. For example:



- 2. Select the type of report (for example, Display Blockgroup Chart Predictives) you want to generate and select a Spatial Filter (for example, Rectangle).
- 3. Minimize the Map widget.
- 4. Make a map selection using the selected Spatial Filter and return to the Map widget.
- 5. Click Run Report.

For example, the following report displays a popup chart on the map that is based on the selection made using the Rectangle Spatial Filter.



Defining WebFOCUS Reporting Procedures

WebFOCUS reporting procedures (FOCEXECs) are used to integrate between WebFOCUS and ArcGIS Server. The following types of FOCEXECs can be created for a Geographic Business Intelligence Solution (GBIS):

- **Report.** Runs a report based on selections from a map.
- **Map.** Runs a report based on the currently visible features on a map.
- **Identify.** Runs a report based on a feature selected from a map.

The following image shows the XML definition file (esriconfig_new.xml) being edited in the ESRI Configuration Utility. The esriconfig_new.xml file is used by the Retail Predictives sample application. In this image, the Focexecs tab is selected.

ESRI Configuration Utility: IBFS:/EDA/	/EDASERVE/orlando/esriconfig	_new.xml - Windows Int 🔳 🗖 🔀	
Focexecs Synthetic Map Services	Map Services Symbols	Bookmarks Savascript Settings and sto accomplish the integration between y, or map.	
Focexecs	Properties Inbound Layers Ou	tbound Layers	
Description	Property	Value	
🔀 Display Banks	Prompt	Display Banks	
🔯 Display Sales by Parameters	Td	fey3	
Kale Color by Business Type	Tura		
Color by Predictive Sales	Туре	Focexec: IBFS:/EDA/EDASERVE/orian	
Total Predicted Sales - Graph	Command Line Attributes	None	
Predicted Sales of selected Fips	Binding Type	Report	
Detailed Report	Default Fex	No	
Map drill down	Draw Select Map	No	
End Supermarket Count Report	No Menu	No	
Display Blockgroup Chart Predictives	7		
	Zoom	NO	
	Window Name		
	Display Group		
	No Thumbnail	Yes	
	No		
View XML		Save 🔻 Done	

The Retail Predictives sample application uses the following FOCEXECs:

Report

Display Banks

/orlando/bankloc.fex

Display Sales by Parameters

/orlando/rp_sales.fex

□ Total Predicted Sales - Graph

/orlando/totalsales_graph.fex

Predicted Sales of selected Fips

/orlando/rp_bustype.fex

Detailed Report

/orlando/stores_count_bustype.fex

Food Supermarket Count Report

/orlando/food_supermarkets_by_county.fex

Мар

Color by Business Type

/orlando/mp_highest_retailsales.fex

Color by Predictive Sales

/orlando/mp_sales.fex

Map drill down

/orlando/mp_fips.fex

Display Blockgroup Chart Predictives

/orlando/blockgroup_chart.fex

Identify

Identify Store

/orlando/identify_store.fex

Procedure: How to Add a Report FOCEXEC

To add a Report FOCEXEC using the ESRI Configuration Utility:

1. Open the WebFOCUS Business Intelligence (BI) Portal by typing the following URL in your web browser:

http://server:port/ibi_apps

where:

server

Is the name of the server on which WebFOCUS is installed.

port

Is the number of the port on which the server is listening.

The WebFOCUS Sign In page opens, as shown in the following image.

Welcome to WebFOCUS	
	Choose Language Sign in to WebFOCUS
Business Intelligence and Analytics	User Name:
For Everyone	Password:
→ Explore the WebFOCUS Editions	Sign In
O Visit the Information Center	Publio Access

- 2. Enter the following default credentials:
 - User Name: admin
 - Password: admin
- 3. Click Sign In.



The WebFOCUS BI Portal page opens, as shown in the following image.

4. Click Tools from the top menu and select ESRI Configuration Utility.



ESRI Configuration Utility	X
New File	bFOCUS dit File
	Cancel

The ESRI Configuration Utility dialog opens, as shown in the following image.

5. Click New File.

The Browse Path dialog opens, as shown in the following image.

😭 Browse Path	23
Select the path to the reporting server and/or the application you want to use with this file.	
✓	
baseapp	
foccache	
🕨 🚞 ibidemo	
🕨 🚞 ibimagn	
ibinccen	
🕨 🚞 ibisamp	
maintain	
🛩 🚋 orlando	
session	
	7
OK Cancel	

- 6. Select an application folder on the WebFOCUS Reporting Server where the new XML definition file will be located when it is saved (for example, orlando).
- 7. Click OK.

The ESRI Configuration Utility opens for a new XML definition file, as shown in the following image.

🖉 ESRI Configuration Utility: New F	File - Windows Internet Explorer
Focexecs 🔜 Synthetic Map Services	s 📑 Map Services 🔄 Symbols 🌄 Bookmarks 🛂 Javascript 🔄 Settings 🥹
The WebFOCUS GIS Adap WebFOCUS and ArcGIS Se These are called fexes and	ter uses standard FOCUS language commands to accomplish the integration between erver. d can be one of three types: report, identify, or map.
Focexecs	Properties Inbound Lavers Outbound Lavers
* 🗙 🛃	2 · · · · · · · · · · · · · · · · · · ·
Description	Property Value
	<
View XML	Save 💌 Done

The Focexecs tab is selected by default.

8. Click Add focexec in the left pane.

K Focexecs	a Synthetic Map Service
K	The WebFOCUS GIS Ada WebFOCUS and ArcGIS S These are called fexes ar
Focexecs	ec

The Create New Fex-Map Binding dialog opens, as shown in the following image.

📉 Create New Fex-Map Binding	M
Type: Focexec: v	
Detailed Report	
Binding type: Seport (Use map selection to filter report) Map (Generate map symbols based on report output)	
O Identify (Show information about map symbols using report output)	
OK Cance	el

- 9. Perform the following steps:
 - a. Ensure Focexec is selected from the Type drop-down list.
 - b. In the Prompt field, enter a name (for example, Detailed Report) that will be used to identify this report in the application (accessed by the WebFOCUS GIS Viewer for Flex).
 - c. Select *Report* from the Binding type area.
- 10. Click *Browse* to the right of the Fex file path field.

The Open dialog is displayed.

🏠 Open - IBFS:/EDA/EDASERVE/orlando 💷				
G IBFS:/EDA ► EDASERVE ► orlando ►				
Organize •			₽== -	
✓	^	Name 🔿	Size 🔺	
🕨 📄 baseapp		📄 sales. fex	0.97 KB	
🕨 📄 foccache		select_stores.fex	0.97 KB	
🕨 📄 ibidemo		store_bustype.fex	0.75 KB	
🕨 📄 ibimagn		stores.fex	1.02 KB	
ibinccen		stores_count_bustype.fex	2.21 KB	
🕨 📄 ibisamp		stores_count_bustype2.fex	2.41 KB	
🕨 📄 maintain		stores_google.fex	1.04 KB	
🕨 🔛 orlando		stores_sel.fex	0.90 KB	
session		test_predictive.fex	0.95 KB	
2	×	totalsales blkgrp.fex	0.78 KB	
File name:	stores_cour	nt_bustype V Fex Files (*,fex)	~	
		Open	Cancel	

11. Browse to the *orlando* application directory under EDASERVE, select the *stores_count_bustype.fex* Report FOCEXEC, and click *Open*.

You are returned to the Create New Fex-Map Binding dialog, as shown in the following image.

🛐 Create New Fex-Map Binding	X
Type: Focexec: BFS:/EDA/EDASERVE/orlando/stores_count_bustype.fex	
Detailed Report]
 Binding type: Report (Use map selection to filter report) Map (Generate map symbols based on report output) Identify (Show information about map symbols using report output) 	
OK Cancel	

Notice that the path to the selected Report FOCEXEC (for example, stores_count_bustype.fex) is now added to the Fex file path field.

Note: To explore the syntax and structure used for this Report FOCEXEC (stores_count_bustype.fex), see *Sample Report FOCEXEC* on page 76.

12. Click OK.

The new Report FOCEXEC (called Detailed Report) is added to the Focexecs pane in the ESRI Configuration Utility, as shown in the following image.

ESRI Configuration Utility: IBFS:/	EDA/EDASER	VE/orlando/orlan	do_test.xml - Windows Internet Explorer	
Focexecs 🔜 Synthetic Map Services	Map Ser	vices Symbols	📴 Bookmarks 🛛 🖳 Javascript 🛛 🔄 Settings	0
The WebFOCUS GIS Adapt These are called fexes and	er uses standa I can be one of	rd FOCUS language c three types: report, i	ommands to accomplish the integration between WebFOCUS and ArcGIS Server. dentify, or map.	
Focexecs	Properties I	nbound Layers Out	bound Layers	_
* X 2+	24			
Description	Property		Value	
Example 1 Detailed Report	Prompt		Detailed Report	_
	Id		fex1	_
	Туре		Focexec: IBFS:/EDA/EDASERVE/orlando/stores_count_bustype.fex	
	Comman	nd Line Attributes	None	
	Binding	Туре	Report	
Default Fex		Fex	No	
Draw Select Map		lect Map	No	
n n	No Menu		No	
	Zoom		No	
	Window	Name		
	Display	Group		
	No Thumbnail		Yes	
	Buffer Fi	xed	No	
	Buffer Type		Default	
	Buffer S	ymbol	Default	
	Buffer U	nits	Default	
	Buffer D	istance	Default	
	•			
View XML			Save 🔍 Don	e

The Properties tab lists the available configuration properties for the Report FOCEXEC. Enter the configuration properties for the Detailed Report FOCEXEC, as listed in the following table.

Property	Description
Prompt	The Prompt value that you specified in the Create New Fex-Map Binding dialog. Detailed Report

Property	Description
ld	An ID that is automatically assigned to the FOCEXEC based on the order it is added.
Туре	The type (Focexec or Adhoc) and path to the selected Report FOCEXEC on the server. Focexec:IBFS:/EDA/EDASERVE/orlando/ stores_count_bustype.fex
Command Line Attributes	None
Binding Type	The type of FOCEXEC (Report, Map, or Identify), as indicated by the selection made from the Binding type area in the Create New Fex-Map Binding dialog. Report
Default Fex	Designates this Report FOCEXEC to be the report that is launched when no other is specified. Yes
Draw Select Map	Changes the map view after the user makes a selection. The WebFOCUS GIS Viewer for Flex displays a map image with the selections of the user changed according to the symbol chosen for the inbound layer.
No Menu	Removes this procedure from the menu of the WebFOCUS GIS Viewer for Flex.
Zoom	Zooms into the area that was selected in the WebFOCUS GIS Viewer for Flex.

Property	Description
Window Name	Displays the report output in a new window. This option can be used for all report output formats that are not HTML, such as PDF and Excel.
Display Group	Assigns the Report FOCEXEC to a display group. This is reflected in the menu for reports. The menu hierarchy displays as Layer- Display Group-Prompt.
No Thumbnail	Yes
Buffer Fixed	Determines whether the buffer distances are preset or can be changed from the user interface.
Buffer Type	The type of buffer to perform around the graphic or around selected features. Available values from the drop-down list include Feature, Sketch, Disabled, and Normal.
Buffer Symbol	Allows you to select a Buffer symbol style from the drop-down list to be used by your Report FOCEXEC.
Buffer Units	The unit of measure used for buffering.
Buffer Distance	The distance values used for buffering. This can be a list of comma-separated values.

For example:

Property Value Prompt Detailed Report Id fex1 Type Focexec: IBFS:/EDA/EDASERVE/orlando/stores_count_bustype.fex Command Line Attributes None Binding Type Report Default Fex No Draw Select Map No No No Zoom No Window Name Display Group Display Group Yes Buffer Fixed No Buffer Fixed Default Buffer Type Default Buffer Type Default Buffer Units Default Buffer Distance Default		
PromptDetailed ReportIdfx1TypeFocxec: IBFS:/EDA/EDASERVE/orlando/stores_count_bustype.fexCommand Line AttributeNoneBinding TypeReportDefault FexNoDefault FexNoNomeNoneTorw Select MapNoNoNoneZoomNoVindow Name-Display GroupVesNoneSelect MapNoSelect MapDisplay Group-Buffer FixedNoBuffer FixedDefaultBuffer TypeDefaultBuffer TypeDefaultBuffer DistanceDefaultSelect MapDefaultBuffer DistanceNoBuffer DistanceNoSelect MapDefaultSelect M	Va	/alue
Idfx1Typefx1Commad Line Attributefc2xcs: IBFS:/EDA/EDA/SERVE/orlando/stores_count_bustype.fexCommad Line AttributekoneBinding TypeReportBenderReportDefault FexNoNo MenuNoZoomNoZoomNoVindow NameImage: Second Seco	De	Detailed Report
TypeFocexec: IBFS:/EDA/EDASERVE/orlando/stores_count_bustype.fexCommand Line AttributesNonBinding TypeReportDefault FexNoDraw Select MapNoNo MenuNoZoonNoWindow Name-Display Group-Buffer FixedNoBuffer FixedDefaultBuffer TypeDefaultBuffer TypeDefaultBuffer DistanceDefaultBuffer Dis	fe	fex1
Command Line AttributesNoneBinding TypeReportDefault FexNoDraw Select MapNoNoNoneZoomNoKindow Name-Display GroupSelBuffer FixedNoBuffer TypeDefaultBuffer TypeDefaultBuffer UnitsDefaultBuffer DistanceDefaultBuffer DistanceDefaultBuf	Fo	Focexec: IBFS:/EDA/EDASERVE/orlando/stores_count_bustype.fex
Binding TypeReportDefault FexNoDraw Select MapNoNoNoNo MenuNoZoomNoWindow Name-Display Group-No-Buffer FixedNoBuffer TypeDefaultBuffer UnitsDefaultDefault-Buffer DistanceDefault	d Line Attributes No	None
Default FexNoDraw Select MapNoNo MenuNoZoomNoZoomNoWindow Name-Display Group-No ThumbnailYesBuffer FixedNoBuffer TypeDefaultBuffer JymbolDefaultBuffer DistanceDefault	ype Re	Report
Draw Select MapNoNo MenuNoZoomNoWindow Name-Display Group-No ThumbnailYesBuffer FixedNoBuffer TypeDefaultBuffer JymbolDefaultBuffer DistanceDefault	ex No	No
No MenuNoZoomNoWindow Name-Display Group-No ThumbnailYesBuffer FixedNoBuffer TypeDefaultBuffer SymbolDefaultBuffer UnitsDefaultBuffer DistanceDefault	ect Map No	No
ZoomNoWindow NameImage: Constraint of the sector	Na	Vo
Window Name Image: State	Na	No
Display Group Image: State Sta	lame	
No Thumbnail Yes Buffer Fixed No Buffer Type Default Buffer Symbol Default Buffer Units Default Buffer Distance Default	roup	
Buffer Fixed No Buffer Type Default Buffer Symbol Default Buffer Units Default Buffer Distance Default	onail Ye	/es
Buffer Type Default Buffer Symbol Default Buffer Units Default Buffer Distance Default	ed No	No
Buffer Symbol Default Buffer Units Default Buffer Distance Default	pe De	Default
Buffer Units Default Buffer Distance Default	mbol De	Default
Buffer Distance Default	i ts De	Default
	tance De	Default

13. Click Save and specify a path and file name (for example, esriconfig_orlando.xml) that will be used to identify the XML definition file that you are configuring for your application.

Procedure: How to Define an Inbound Layer for a Report FOCEXEC

The binding between the Report FOCEXEC and ArcGIS Server is achieved by defining an inbound layer. Inbound layers are used to identify which attribute is extracted from a map layer when a user draws a selected area on the map. Inbound layers provide information from ArcGIS Server to WebFOCUS. One or more inbound layer(s) associates a FOCEXEC to one or more map layer(s). They also define the filtering criteria for a FOCEXEC. This is usually in the format of a file, a numeric amper variable, or a string amper variable.

To define an inbound layer for the Report FOCEXEC using the ESRI Configuration Utility:

1. Select an available Report FOCEXEC for which you want to configure an inbound layer and then click the *Inbound Layers* tab located in the FOCEXECs configuration area of the ESRI Configuration Utility.

Note: In this example, an inbound layer is defined to the Report FOCEXEC called Food Supermarket County Report (food_supermarkets_by_county.fex).

ESRI Configuration Utility: IBFS:/	EDA/EDASERVE/orlando/esriconfig_new.xml - Windows Inte 🗐 🗖 🔀
Synthetic Map Services	📔 Map Services 🛛 🔤 Symbols 🛛 🔽 Bookmarks 🗍 🛂 Javascript 🗍 🔄 Settings 🥑
The WebFOCUS GIS Adap WebFOCUS and ArcGIS Se These are called fexes and	ter uses standard FOCUS language commands to accomplish the integration between rver. I can be one of three types: report, identify, or map.
Focexecs	Properties Inbound Layers Outbound Layers
* 🗙 🛃	* 21
Description	Add inbound layer
Display Sales by Parameters	
Color by Business Type	
Color by Predictive Sales	
Redicted Sales of selected Fins	
Detailed Report	
🔤 Map drill down	
🔯 Identify Store	
🔀 Food Supermarket Count Report	
📴 Display Blockgroup Chart Predicti	
	· · · · · · · · · · · · · · · · · · ·
View XML	Save Done

2. Click Add inbound layer in the right pane.

Create a new inbound layer
An inbound layer is used to select map features.
Available REST Services:
Name
Type

Synthetic Map Serv...
Synthetic Service

Next > Cancel

The Create a new inbound layer dialog opens, as shown in the following image.

You must first configure a connection to an available ArcGIS Server.

3. Click Add.

The REST Service Connection Information dialog opens, as shown in the following image.

🔂 REST S	ervice Connection Information
The ArcGIS hosted by well-known The defaul * Java: ht * .NET: ht	S Server REST API, provides a simple, open Web interface to services ArcGIS Server. When using the REST API, you typically start from a nendpoint, which represents the server catalog. t start URL for an ArcGIS Server installation is: tp:// <host>:8399/argis/rest tp://<host>/arcgis/rest</host></host>
Host:	ibigisdev.ibi.com
Port:	8399
Instance:	/arcgis/rest/services
URL:	http://ibigisdev.ibi.com:8399/arcgis/rest/services
🕑 Use pro	oxy to access REST service.
	OK Cancel

The Use proxy to access REST service check box provides you with the option to enable or disable usage of the proxy.jsp file to navigate to a REST endpoint when adding a new map service. This option is enabled by default.

If the Use proxy to access REST service check box is selected, then the proxy.jsp file on the application server must be changed to add the URL to the map server. If the Use proxy to access REST service check box is not selected, and the application server and the map server are not on the same machine, then requests to the map server will fail and an error message indicating a network error is generated. This is the result of a default setting in web browsers, which prevents cross-domain Ajax calls. This setting can be changed in the security settings section of your web browser configuration.

Note: If you are using Microsoft Internet Explorer Version 10 and the *Use proxy to access REST service* check box is not selected, the following dialog box is displayed.

Internet Ex	(plorer
ß	This page is accessing information that is not under its control. This poses a security risk. Do you want to continue?
	Yes No

If you click Yes, then Microsoft Internet Explorer allows you to access the map service without the proxy.jsp. If you click *No*, an error message indicating *Access is denied* is displayed.

If you are using Google Chrome and the *Use proxy to access REST service* check box is not selected, an error message indicating *A network error* is displayed. If you are using Mozilla Firefox 24 and the *Use proxy to access REST service* check box is not selected, an error message indicating *Failure* is displayed. As a workaround, you must select the *Use proxy to access REST service* check box and edit the proxy.jsp to add a REST endpoint to your proxy list.

To edit the proxy.jsp file, navigate to the following directory:

<WF_HOME>\webapps\webfocus\tools\esri_config\proxy.jsp

Add your REST endpoint, as indicated by the following example:

4. Specify a host name for ArcGIS Server in the Host field followed by the port, instance, and URL in the corresponding fields. Consult your ArcGIS administrator for the correct values to use.

Note: As a best practice, do not include an ending forward slash (/) character when specifying an ArcGIS Server URL in the proxy.jsp file. If a forward slash character is specified, then you must ensure that the value entered in the Instance field of the REST Service Connection Information dialog also contains a forward slash at the end.

5. Click OK.

You are returned to the Create a new inbound layer dialog.

Available REST Services:	Add	Remove
Name	Туре	^
🏭 Census Block Points	Layer	
🌉 Census Block Group	Layer	
a Counties	Layer	
accoarse Counties	Layer	
a Detailed Counties	Layer	_
atates	Layer	
🗉 🧾 ESRI_Population_World	Map Server	
🗉 🚞 Elevation	Folder	
🗉 🚞 Locators	Folder	
🗉 🚞 Louisville	Folder	
🗉 🚞 Network	Folder	
	- 11	

- 6. Expand an available Map Server node and then select the layer (for example, Census Block Group) that will be used to select the map features.
- 7. Click Next.
The Select Attributes dialog opens, which is populated with all of the attribute names from the layer that was selected.

Cre	Create a new inbound layer							
Select attribute(s) to be used with the focexec. Define a Focus field format, ESRI layer field size and a quote to be used for queries from an ESRI layer. Use single quote with shapefile layers and double quote with SDE layers. Select Attributes:								
	Name	Alias	Туре	То	Format	Size	Quote	^
	😫 📃 TRACT	TRACT	String	->	N/A	N/A	N/A	
	😫 📃 BLKGRP	BLKGRP	String	->	N/A	N/A	N/A	
	😌 🗹 FIPS	FIPS	String	->	A20 ¥	20	Single 🔽	
- F	POP2000	POP2000	Integer	->	N/A	N/A	N/A	
	POP2007	POP2007	Double	->	N/A	N/A	N/A	
		POP00_SQMI	Double	->	N/A	N/A	N/A	
	POP07_S	POP07_SQMI	Double	->	N/A	N/A	N/A	
	\varTheta 📃 WHITE	WHITE	Integer	->	N/A	N/A	N/A	
	BLACK	BLACK	Integer	->	N/A	N/A	N/A	~
Use Buffering								

8. Select the attribute(s) (for example, FIPS) that you want to be used as a unique identifier to link the map service layers with FOCEXEC columns.

You can modify the Format, Size, and Quote value columns according to your requirements.

The Format column reflects the FOCEXEC format to be used for conversion. Valid FOCUS formats are used with a length (for example, A20).

The Size column reflects the length of the map service layer field.

The Quote column reflects the type of quote to use for querying the map service layer field. Use single quotes for shape file layers and double quotes for SDE layers.

9. Click Next when you have finished making your attribute selections.

The following dialog opens, which allows you to select the report column for selecting values from a FOCUS database.

Create a new inbour	nd layer			
Select the report col	umn for selecting value	s from FOCUS	database.	
Focus filter format:	File	File name:	FIPSLIST	
		< <u>B</u> ac	k Finish	Cancel

10. Choose the filter type (for example, File) from the Focus filter format drop-down list.

The available choices allow you to pass a sequential file of values, a string of alphanumeric values enclosed in single quotes and separated by "OR", or a string of numeric values separated by "OR".

The value that you provide in the File name field (for example, FIPSLIST) is used to name the filter variable or file that the adapter passes to WebFOCUS.

11. Click Finish.

The inbound layer definition is listed in the Inbound Layers tab of the FOCEXECs configuration area, as shown in the following image.

Focexecs	Properties Inbound Layers Outbound Layers			
₩ 🗙 🛃	※ ≵ +			
Description		Property	Value	
🔯 Display Banks	Ξ 🏭	Census Block Group		
Display Sales by Parameters		Location	http://ibigis10.ibi.com:8399/arcgis/rest/services/census_zip/MapServer/1	
🔯 Color by Business Type	-			
📴 Color by Predictive Sales	Attribute Names		FIPS	
Total Predicted Sales - Graph Symbol		Symbol	selectMapPolygon	
Predicted Sales of selected Fips		Callout Symbol	None	
🛅 Detailed Report		Poffee Combal	Neer	
🔀 Map drill down	<u> </u>	burrer Symbol	None	
📴 Identify Store		Focus Filter Format	File	
🔯 Food Supermarket Count Report		Filter File Name	FIPSLIST	
🔀 Display Blockgroup Chart Predictives				

The Properties table lists the available configuration properties for the inbound layer definition. The following table lists and describes these properties.

Property	Description
Location	The location of the map layer. http://ibigisl0.ibi.com:8399/arcgis/rest/services/ census_zip/MapServer/1
Attribute Names	The selected attribute(s) for the inbound layer definition.
Symbol	Allows you to select an available symbol definition from the drop- down list that will be used to render the map illustrating which features have been selected. <pre>selectMapPolygon</pre> For more information on defining symbols, see How to Configure a New Symbol Definition on page 106.
Callout Symbol	Allows you to select a callout symbol style from the drop-down list to be used by your FOCEXEC.

Property	Description
Buffer Symbol	Allows you to select a buffer symbol style from the drop-down list to be used by your FOCEXEC.
Focus Filter Format	The current filter type that is being used by the inbound layer definition (File, String Amper, or Numeric Amper). File
Filter File Name	The filter variable or file for the inbound layer definition.

Reference: Sample Report FOCEXEC

This section provides the syntax used by the Detailed Report FOCEXEC (stores_count_bustype.fex).

```
-* File stores_count_bustype.fex
JOIN
RETAIL BLKGRPS.SEG01.FIPS IN RETAIL BLKGRPS TO MULTIPLE
PREDICTIVESBLK.SEG01.FIPS IN PREDICTIVESBLK TAG J2 AS J2
END
TABLE FILE RETAIL_BLKGRPS
SUM
     J2.SEG01.PREDICTED SALES AS 'PREDICTED SALES'
    RETAIL_BLKGRPS.SEG01.POP10_SQMI AS 'POPULATION 2000 PER SQ. MILE'
    RETAIL_BLKGRPS.SEG01.POP00_SQMI AS 'POPULATION 2010 PER SQ. MILE'
    MAX.RETAIL_BLKGRPS.SEG01.MED_AGE AS 'MEDIAN AGE'
    CNT.RETAIL_BLKGRPS.SEG01.STOREID AS 'STORE COUNT'
BY LOWEST J2.SEG01.FIPS
ON TABLE SET DROPBLNKLINE ON
ON TABLE SET PAGE-NUM NOLEAD
ON TABLE SET EXPANDABLE ON
ON TABLE NOTOTAL
ON TABLE PCHOLD FORMAT HTML
ON TABLE SET HTMLCSS ON
ON TABLE SET STYLE *
    INCLUDE = endeflt,
$
    DEFMACRO=COND0001,
    MACTYPE=RULE,
    WHEN=N6 GE 100,
$
TYPE=REPORT,
$
     GRAPHTYPE=DATA,
     COLUMN=N6,
    GRAPHCOLOR='GREEN',
$
    GRAPHTYPE=DATA,
    COLUMN=N6,
    GRAPHCOLOR='RED',
    MACRO=COND0001,
$
TYPE=REPORT,
    LINES-PER-PAGE=UNLIMITED,
```

```
$
TYPE=DATA,
    COLUMN=N1,
     DRILLMENUITEM='Detailed Report',
          FOCEXEC=rp_sales( \
     FIPSLIST=N1 \
     ),
     DRILLMENUITEM='Show in Map',
          JAVASCRIPT=RunMyMapOutput( \
     'FIPS' \
    N1 \
     fex8' \setminus
     ),
$
TYPE=TITLE,
     COLUMN=N1,
     DRILLMENUITEM='Detailed Report for Predicted Sales',
          FOCEXEC=rp_sales( \
     FIPSLIST=N1 \
     ),
     DRILLMENUITEM='Show in the Map',
         JAVASCRIPT=RunMyMapOutput( \
     'FIPS' \
    N1 \
     'fex8' ∖
     ),
$
TYPE=REPORT,
    OBJECT=MENU,
     COLOR='WHITE',
    HOVER-COLOR=RGB(66 70 73),
     BACKCOLOR=RGB(102 102 102),
    HOVER-BACKCOLOR=RGB(218 225 232),
    BORDER-COLOR='WHITE',
$
TYPE=REPORT,
    OBJECT=STATUS-AREA,
    COLOR='WHITE',
    BACKCOLOR=RGB(102 102 102),
$
TYPE=REPORT,
    OBJECT=CURRENT-ROW,
    HOVER-BACKCOLOR=RGB(218 225 232),
    BACKCOLOR=RGB(200 200 200),
```

```
$
TYPE=REPORT,
     OBJECT=CALC-AREA,
     COLOR='WHITE',
     BACKCOLOR=RGB(102 102 102),
$
TYPE=REPORT,
     COLUMN=N2,
     SQUEEZE=1.138889,
$
TYPE=REPORT,
     COLUMN=N3,
     SQUEEZE=0.680556,
$
TYPE=REPORT,
     COLUMN=N4,
     SQUEEZE=0.680556,
$
ENDSTYLE
END
```

Procedure: How to Add a Map FOCEXEC

To add a Map FOCEXEC using the ESRI Configuration Utility:

1. Access the ESRI Configuration Utility, as described in *How to Add a Report FOCEXEC* on page 56.

The ESRI Configuration Utility dialog opens, as shown in the following image.



2. Click Edit File.

Open - IBFS:/EDA/EDASERVE/orlando					
G IBFS:/EDA > E	EDASERVE 🕨	orla 🍕		- 🔍	
Organize 🕶				=== -	
	^	Name 🔿	Size	Туре	
baseapp		📄 crossdomain.xml	0.09 KB	xml	
foccache		esriconfig_new.xml	23.31 KB	xml	
ibidemo		esriconfig_orlando.xml	3.66 KB	xml	
ibimagn		mytest.xml	5.28 KB	xml	
ibinccen					
🕨 🚞 ibisamp	=				
🕨 🚞 maintain					
🕶 🔤 orlando					
session					
	~				
<	>	< III		>	
File name:	esriconfig_c	orlando.xml 💌 Configuratio	on Files (*.xml)	•	
		Open	Car	ncel	

The Open dialog is displayed, as shown in the following image.

3. Browse to the *orlando* application directory under EDASERVE, select the *esriconfig_orlando.xml* definition file that you configured earlier, and click *Open*.

The ESRI Configuration Utility opens the selected *esriconfig_orlando.xml* definition file, as shown in the following image.

ESRI Configuration Utility: IBFS:/E	DA/EDASERVE/orlando/esric	onfig_orlando.xml - Windows Internet Explorer 🛛 🔲 🔀				
📓 Focexecs 🛛 👢 Synthetic Map Services	Map Services Symbols	😰 Bookmarks 🛛 💁 Javascript 🛛 🖾 Settings 🖉 🥑				
The WebFOCUS GIS Adapter uses standard FOCUS language commands to accomplish the integration between WebFOCUS and ArcGIS Server. These are called fexes and can be one of three types: report, identify, or map.						
Focexecs	Properties Inbound Layers Ou	tbound Layers				
× X 2*	2*					
Description	Property	Value				
	Prompt	Detailed Report				
	Id	fex1				
	Туре	Focexec: IBFS:/EDA/EDASERVE/orlando/stores_count_bustype.fex				
	Command Line Attributes	None				
	Binding Type	Report				
	Default Fex	No				
	Draw Select Map	No				
	No Menu	No				
ll l	Zoom	No				
	Window Name					
	Display Group					
	No Thumbnail	Yes				
	Buffer Fixed	No				
	Buffer Type	Default				
	Buffer Symbol	Default				
	Buffer Units	Default				
	Buffer Distance	Default				
View XML Save Done						

The Focexecs tab is selected by default.

4. Click Add focexec in the left pane.

Focexecs
⅔ χ ² / ₂
De Add focexec
Detailed Report

Create New Fex-Map Binding	X
Type:	
Focexec:	
Prompt:	
Binding type: Report (Use map selection to filter report)	
Map (Generate map symbols based on report out	tput)
 Identify (Show information about map symbols us) 	sing report output)
	OK Cancel

The Create New Fex-Map Binding dialog opens, as shown in the following image.

- 5. Perform the following steps:
 - a. Ensure Focexec is selected from the Type drop-down list.
 - b. In the Prompt field, enter a name (for example, Map Drill-Down) that will be used to identify this report in the application (accessed by the WebFOCUS GIS Viewer for Flex).
 - c. Select *Map* from the Binding type area.
- 6. Click *Browse* to the right of the Fex file path field.

The Open dialog is displayed.

😭 Open - IBFS:/EDA/EDASERVE/orlando 💿 🖾						
G IBFS:/EDA ► EDASERVE ► orlando ►						
Organize 🔻			₿ = ⊒ ↓			
✓	Name 🔿	Size	Type 🔥			
baseapp	get_businesstype.fex	0.74 KB	fex			
foccache	get_day_of_the_week	0.91 KB	fex			
🕨 🚞 ibidemo 🔤	get_fips.fex	0.16 KB	fex			
🕨 🚞 ibimagn	identify_store.fex	1.32 KB	fex			
ibinccen	mp_fips.fex	1.32 KB	fex 🗏			
🕨 🚞 ibisamp	mp_highest_retailsales	1.11 KB	fex 👘			
🕨 🚞 maintain	mp_sales.fex	2.08 KB	fex			
🕨 🔛 orlando	predicted_bustype.fex	0.75 KB	fex			
session	predictive_graph.fex	6.79 KB	fex			
	report_demographics.fex	0.03 KB	fex 🞽			
	<		>			
File name: mp_fips.fex	v Fex Files (*.fex)		×			
	Open	Cance	2			

7. Browse to the *orlando* application directory under EDASERVE, select the *mp_fips.fex* Map FOCEXEC, and click *Open*.

You are returned to the Create New Fex-Map Binding dialog, as shown in the following image.

Create New Fex-Map Binding					
Type: Focexec: V IBFS:/EDA/EDASERVE/orlando/mp_fips.fex					
Prompt:					
Map Drill-Down					
Binding type: Report (Use map selection to filter report) Map (Generate map symbols based on report output)					
 Identify (Show information about map symbols using report output) 					
OK Cancel					

Notice that the path to the selected Map FOCEXEC (for example, mp_fips.fex) is now added to the Fex file path field.

Note: To explore the syntax and structure used for this Map FOCEXEC (mp_fips.fex), see *Sample Map FOCEXEC* on page 98.

8. Click OK.

The new Map FOCEXEC (called Map Drill-Down) is added to the Focexecs pane in the ESRI Configuration Utility, as shown in the following image.

🖉 ESRI Configuration Utility: IBFS:/EDA/EDASERVE/orlando/esriconfig_orlando.xml - Windows Internet Explorer 👘 🔲 🗖 🔀						
📓 Focexecs 🛛 👢 Synthetic Map Services	Map Services Symbols	🔛 Bookmarks 🛛 🖳 Javascript 🛛 🖳 Settings 🛛 🛛 🥹				
The WebFOCUS GIS Adapter uses standard FOCUS language commands to accomplish the integration between WebFOCUS and ArcGIS Server. These are called fexes and can be one of three types: report, identify, or map.						
Focexecs	Properties Inbound Layers Ou	tbound Layers				
* 🗙 🛃	2+					
Description	Property	Value				
Betailed Report	Prompt	Map Drill-Down				
Map Drill-Down	Id	fex2				
	Туре	Focexec: IBFS:/EDA/EDASERVE/orlando/mp_fips.fex				
	Command Line Attributes	None				
	Binding Type	Мар				
	Default Fex	No				
	Limit Layers	No				
	No Menu	No				
	Zoom	No				
	Window Name					
	Display Group					
	No Thumbnail	Yes				
	Buffer Fixed	No				
	Buffer Type	Default				
	Buffer Symbol	Default				
Buffer Units Default		Default				
	Buffer Distance	Default				
View XML Save 🔻 Done						

The Properties tab lists the available configuration properties for the Map FOCEXEC. Enter the configuration properties for the Map Drill-Down FOCEXEC, as listed in the following table.

Property	Description
Prompt	The Prompt value that you specified in the Create New Fex-Map Binding dialog. Map Drill-Down

Property	Description
ld	An ID that is automatically assigned to the FOCEXEC based on the order it is added. fex2
Туре	The type (Focexec or Adhoc) and path to the selected Report FOCEXEC on the server. Focexec:IBFS:/EDA/EDASERVE/orlando/mp_fips.fex
Command Line Attributes	None
Binding Type	The type of FOCEXEC (Report, Map, or Identify), as indicated by the selection made from the Binding type area in the Create New Fex-Map Binding dialog. Map
Default Fex	Designates this Report FOCEXEC to be the report that is launched when no other is specified.
Limit Layers	Displays layers that are only listed within the Outbound area. $\ensuremath{\mathtt{No}}$
No Menu	Removes this procedure from the menu of the WebFOCUS GIS Viewer for Flex. Yes
Zoom	Zooms into the area that was selected in the WebFOCUS GIS Viewer for Flex. Yes
Window Name	Displays the report output in a new window. This option can be used for all report output formats that are not HTML, such as PDF and Excel.

Property	Description
Display Group	Assigns the Report FOCEXEC to a display group. This is reflected in the menu for reports. The menu hierarchy displays as Layer- Display Group-Prompt.
No Thumbnail	Yes
Buffer Fixed	Determines whether the buffer distances are preset or can be changed from the user interface.
Buffer Type	The type of buffer to perform around the graphic or around selected features. Available values from the drop-down list include Feature, Sketch, Disabled, and Normal. Normal
Buffer Symbol	Allows you to select a Buffer symbol style from the drop-down list to be used by your Report FOCEXEC. Default
Buffer Units	The unit of measure used for buffering.
Buffer Distance	The distance values used for buffering. This can be a list of comma-separated values.

For example:

Property	Value				
Prompt	Map Drill-Down				
Id	fex2				
Туре	Focexec: IBFS:/EDA/EDASERVE/orlando/mp_fips.fex				
Command Line Attributes	None				
Binding Type	Мар				
Default Fex	No				
Limit Layers	No				
No Menu	Yes				
Zoom	Yes				
Window Name					
Display Group					
No Thumbnail	Yes				
Buffer Fixed	No				
Buffer Type	Normal				
Buffer Symbol	Default				
Buffer Units	Feet				
Buffer Distance	50,200				

9. Click Save.

Procedure: How to Define an Outbound Layer for the Map FOCEXEC

The binding between the Map FOCEXEC and ArcGIS Server is achieved by defining an outbound layer. Outbound layers provide information from WebFOCUS to ArcGIS Server, and determine the linkage between a Map Layer attribute and WebFOCUS XML output. Outbound layers are required for WebFOCUS Map bindings. These layers visually represent results from a WebFOCUS Report using color, image, size, title, and text columns.

Done

Save

To define an outbound layer for the Map FOCEXEC using the ESRI Configuration Utility:

1. Select an available Map FOCEXEC (for example, Map Drill-Down) for which you want to configure an outbound layer and then click the *Outbound Layers* tab located in the FOCEXECs configuration area of the ESRI Configuration Utility, as shown in the following image.

Note: In this example, an outbound layer is defined to the Map FOCEXEC called Map Drill-Down (mp_fips.fex).

ESRI Configuration Utility: IBFS:/	/EDA/EDASERVE/orlando/esriconfig_orlando.xml - Windows Inter 🔳 🗖 🔀					
📓 Focexecs 🛛 🌉 Synthetic Map Services	👔 🌆 Map Services 🛛 🙀 Symbols 🛛 🔯 Bookmarks 🏾 🖳 Javascript 🗍 🖾 Settings 👘 🥑					
The WebFOCUS GIS Adap WebFOCUS and ArcGIS Se These are called fexes and	The WebFOCUS GIS Adapter uses standard FOCUS language commands to accomplish the integration between WebFOCUS and ArcGIS Server. These are called fexes and can be one of three types: report, identify, or map.					
Focexecs	Properties Inbound Layers Outbound Layers					
※ ★ ² / ₂	× 2 ¹					
Description	Add outbound layer Value					
Detailed Report						
Map Drill-Down						
View XML	Save 🗸 Done					

2. Click Add Outbound layer in the right pane.

The Create a new outbound layer dialog opens, as shown in the following image.

Cr	Create a new outbound layer						
	An outbound layer is used to render features by the adapter along with the symbology defined either in the FOCEXEC or the configuration editor.						
	Available REST Services:		Add Remove				
	Name	Туре	. 9				
	🗉 🍺 Synthetic Map Serv	Synthetic Service					
			·]				
			Next > Cancel				

You must first configure a connection to an available ArcGIS Server.

3. Click Add.

REST Service Connection Information						
The ArcGIS Server REST API, provides a simple, open Web interface to services hosted by ArcGIS Server. When using the REST API, you typically start from a well-known endpoint, which represents the server catalog. The default start URL for an ArcGIS Server installation is: * Java: http:// <host>:8399/argis/rest * .NET: http://<host>/arcgis/rest</host></host>						
Host:	ibigisdev.ibi.com					
Port:	8399					
Instance:	stance: /arcgis/rest/services					
URL:	RL: http://ibigisdev.ibi.com:8399/arcgis/rest/services					
Use proxy to access REST service.						
	OK Cancel					

The REST Service Connection Information dialog opens, as shown in the following image.

The Use proxy to access REST service check box provides you with the option to enable or disable usage of the proxy.jsp file to navigate to a REST endpoint when adding a new map service. This option is enabled by default.

If the Use proxy to access REST service check box is selected, then the proxy.jsp file on the application server must be changed to add the URL to the map server. If the Use proxy to access REST service check box is not selected, and the application server and the map server are not on the same machine, then requests to the map server will fail and an error message indicating a network error is generated. This is the result of a default setting in web browsers, which prevents cross-domain Ajax calls. This setting can be changed in the security settings section of your web browser configuration.

Note: If you are using Microsoft Internet Explorer Version 10 and the *Use proxy to access REST service* check box is not selected, the following dialog box is displayed.

Internet Ex	plorer
ß	This page is accessing information that is not under its control. This poses a security risk. Do you want to continue?
	Yes No

If you click Yes, then Microsoft Internet Explorer allows you to access the map service without the proxy.jsp. If you click *No*, an error message indicating *Access is denied* is displayed.

If you are using Google Chrome and the *Use proxy to access REST service* check box is not selected, an error message indicating *A network error* is displayed. If you are using Mozilla Firefox 24 and the *Use proxy to access REST service* check box is not selected, an error message indicating *Failure* is displayed. As a workaround, you must select the *Use proxy to access REST service* check box and edit the proxy.jsp to add a REST endpoint to your proxy list.

To edit the proxy.jsp file, navigate to the following directory:

<WF_HOME>\webapps\webfocus\tools\esri_config\proxy.jsp

Add your REST endpoint, as indicated by the following example:

4. Specify a host name for ArcGIS Server in the Host field followed by the port, instance, and URL in the corresponding fields. Consult your ArcGIS administrator for the correct values to use.

Note: As a best practice, do not include an ending forward slash (/) character when specifying an ArcGIS Server URL in the proxy.jsp file. If a forward slash character is specified, then you must ensure that the value entered in the Instance field of the REST Service Connection Information dialog also contains a forward slash at the end.

5. Click OK.

You are returned to the Create a new outbound layer dialog.

Create a new outbound layer			
An outbound layer is used to render features either in the FOCEXEC or the configuration e	by the adapter along ditor.	with the symbolo	gy defined
Available REST Services:		Add	Remove
Name	Туре		^
Census Block Points	Layer		
🌉 Census Block Group	Layer		
Counties	Layer		
Coarse Counties	Layer		
🔜 Detailed Counties	Layer		=
states	Layer		
ESRI_Population_World	Map Server		
🗉 🚞 Elevation	Folder		
🕀 🚞 Locators	Folder		
🗉 🚞 Louisville	Folder		
🗉 🚞 Network	Folder		~
		<u>N</u> ext >	Cancel

- 6. Expand an available Map Server node and then select the layer (for example, Census Block Group) that will be used to select the map features.
- 7. Click Next.

The Select Attributes dialog opens, which is populated with all of the attribute names from the layer that was selected.

Select attribute(s) to Define a Focus field f ESRI layer. Use singl	be used with th format, ESRI lay e quote with sha	e focexec. er field size and pefile layers ar	l a quo nd dout	te to be u ble quote	sed for with SDI	queries from a E layers.	IN
Select Attributes:							
Name	Alias	Туре	То	Format	Size	Quote	^
😟 📃 CNTY_FIPS	CNTY_FIPS	String	->	N/A	N/A	N/A	
STCOFIPS	STCOFIPS	String	->	N/A	N/A	N/A	
🖯 🔲 TRACT	TRACT	String	->	N/A	N/A	N/A	
😫 📃 BLKGRP	BLKGRP	String	->	N/A	N/A	N/A	
😟 🗹 FIPS	FIPS	String	->	A20 ¥	20	Single	
😧 📃 POP2000	POP2000	Integer	->	N/A	N/A	N/A	
😧 📃 POP2007	POP2007	Double	->	N/A	N/A	N/A	
\varTheta 📃 POP00_S	POP00_SQMI	Double	->	N/A	N/A	N/A	
\varTheta 📃 POP07_S	POP07_SQMI	Double	->	N/A	N/A	N/A	~
ose burrening							
							_

8. Select the attribute(s) (for example, FIPS) that you want to be used as a unique identifier to link the map service layers with FOCEXEC columns.

You can modify the Format, Size, and Quote value columns according to your requirements.

The Format column reflects the FOCEXEC format to be used for conversion. Valid FOCUS formats are used with a length (for example, A20).

The Size column reflects the length of the map service layer field.

The Quote column reflects the type of quote to use for querying the map service layer field. Use single quotes for shape file layers and double quotes for SDE layers.

9. Click Next when you have finished making your attribute selections.

The following dialog opens, which allows you to specify a FOCEXEC column name to be used for binding.

Create a new outbound layer
Enter a focexec column name to be used for binding.
Fex column name:
FIPS
< <u>B</u> ack Finish Cancel

10. Specify a FOCEXEC column name (for example, FIPS) and click Finish.

The new outbound layer definition is listed in the Outbound Layers tab of the FOCEXECs configuration area, as shown in the following image.

Focexecs	Properties	Inbound Layers	Outbou	nd Layers		
₩ 🗙 🛃	¥ ⊉+					
Description	P	Property		Value		^
🔯 Display Banks	🗆 🏭 🕻	Census Block Group				
Display Sales by Parameters	L	Location		http://ibigi	s10.ibi.com:8399/arcqis/rest/services/census_zip/MapServer/1	11
Color by Business Type	,	ttribute Names		FIDS		
Color by Predictive Sales	-	account of the second s		115		- 11
Total Predicted Sales - Graph	9	ymbol		symHighlig	ht	-11
Predicted Sales of selected Fips	c	allout Symbol		None		
Detailed Report	F	ex Column Name		FIPS		
Map drill down	I	mage				
End Supermarket Count Report		abel Field				
Display Blockgroup Chart Predictives				NI-		11
		Kollover		NO		-11
	C	olor		COLOR		
	9	hape				
	9	ize				
	Т	Text		POP_GRO	NTH	
	Т	ïtle				
	c	ther Symbol		None		
	Т	ext Symbol		None		
	F	olygon Text Symb	ol	None		
	Ģ	irid Display Info Fi	eld			
	C	olor Table				

The Properties table lists the available configuration properties for the outbound layer definition. The following table lists and describes these properties.

Property	Description
Location	The location of the map layer.
	http://ibigis10.ibi.com:8399/arcgis/rest/services/ census_zip/MapServer/1
Attribute Names	The selected attribute(s) for the outbound layer definition.

Property	Description
Symbol	Allows you to select an available symbol definition from the drop- down list that will be used to render the map illustrating which features have been selected.
	symHighlight
	For more information on defining symbols, see <i>How to Configure a New Symbol Definition</i> on page 106.
Callout Symbol	Allows you to select a callout symbol style from the drop-down list to be used by your FOCEXEC.
Fex Column Name	The specified FOCEXEC column name to be used for binding.
Image	Refers to a FOCUS Report Column to use for the IMAGE field. This image field can be used to symbolize point features.
Label Field	Refers to a FOCUS Report Column to use for labeling features on an outbound layer.
Rollover	Enables or disables rollover (mouse over) support for the outbound layer.
Color	COLOR
Shape	
Size	
Text	POP_GROWTH
Title	
Other Symbol	Allows you to select an additional symbol from the drop-down list.

Property	Description
Text Symbol	Allows you to select an available text symbol from the drop-down list.
Polygon Text Symbol	Allows you to select an available polygon text symbol from the drop-down list.
Grid Display Info Field	Refers to a list of FOCUS Report Column(s) to be displayed in the Data View widget.
Color Table	Allows you to specify a color table to be used by the outbound layer.

Reference: Sample Map FOCEXEC

This section provides the syntax used by the Map Drill-Down FOCEXEC (mp_fips.fex).

```
-* File mp_fips.fex
-*-SET &FIPSLIST = 120950119021;
-SET &FIPSPARM = &FIPS;
TABLE FILE BLOCKGRP_DETAILS
SUM
     BLOCKGRP_DETAILS.SEG01.POP_GROWTH
     COMPUTE COLOR/A20 = IF BLOCKGRP_DETAILS.SEG01.POP_GROWTH GE 100 THEN
'RED'
ELSE IF BLOCKGRP_DETAILS.SEG01.POP_GROWTH GE 80 THEN 'ORANGE'
ELSE IF BLOCKGRP_DETAILS.SEG01.POP_GROWTH GE 60 THEN '255,60,0'
ELSE IF BLOCKGRP_DETAILS.SEG01.POP_GROWTH GE 40 THEN '240,144,14'
ELSE IF BLOCKGRP_DETAILS.SEG01.POP_GROWTH GE 20 THEN '225,208,26'
ELSE IF BLOCKGRP_DETAILS.SEG01.POP_GROWTH GE 0 THEN '166,210,37'
ELSE '128,128,128';
BY LOWEST BLOCKGRP_DETAILS.SEG01.FIPS
WHERE BLOCKGRP_DETAILS.SEG01.FIPS EQ '&FIPSPARM';
ON TABLE SET PAGE-NUM NOLEAD
ON TABLE NOTOTAL
ON TABLE PCHOLD FORMAT HTML
ON TABLE SET HTMLCSS ON
ON TABLE SET STYLE *
    INCLUDE = endeflt,
$
TYPE=REPORT,
    OBJECT=MENU,
    COLOR='WHITE',
    HOVER-COLOR=RGB(66 70 73),
    BACKCOLOR=RGB(102 102 102),
    HOVER-BACKCOLOR=RGB(218 225 232),
    BORDER-COLOR='WHITE',
$
TYPE=REPORT,
    OBJECT=STATUS-AREA,
     COLOR='WHITE',
     BACKCOLOR=RGB(102 102 102),
$
TYPE=REPORT,
    OBJECT=CURRENT-ROW,
    HOVER-BACKCOLOR=RGB(218 225 232),
    BACKCOLOR=RGB(200 200 200),
$
TYPE=REPORT,
    OBJECT=CALC-AREA,
     COLOR='WHITE',
    BACKCOLOR=RGB(102 102 102),
$
ENDSTYLE
END
```

Defining Synthetic Map Services

Most GIS software supports a concept of a free-form layer. In ArcGIS Server, this is known as an acetate layer. Acetate layers allow the developer to place any map related information where the user can view it. An acetate layer by itself is not capable of supporting end-user interaction. WebFOCUS synthetic layers take acetate support to the next level by supporting end-user selection of features to be used as filter values for report and graph requests.

Synthetic layer information is obtained using database queries that retrieve unique feature values along with the latitudes and longitudes of the features. An example of this uses data that is collected by the U.S. Geological Service about recent earthquakes. This information is published in a variety of formats on the USGS website. WebFOCUS can read this information across the Internet and use the latitude and longitude of the earthquake epicenter to display those locations on the map.

WebFOCUS also supports the drawing of lines between multiple points on the map. When the latitude and longitude data is retrieved along with a common data value for multiple points, WebFOCUS will instruct ArcGIS Server to connect those points together. An example of this is the multiple points along the current and projected path of a hurricane. All the points share the same storm name, which will be used to link them together.

And finally the last type of synthetic layer that is supported is a polygon. Polygons are also collections of latitude and longitude values for a common data value. The difference between a synthetic line and synthetic polygon is that WebFOCUS will instruct ArcGIS Server to complete the polygon shape between the last point and the first point of each unique grouping of points.

The following image shows the XML definition file (esriconfig_new.xml) being edited in the ESRI Configuration Utility. The esriconfig_new.xml file is used by the Retail Predictives sample application. In this image, the Synthetic Map Services tab is selected.

🖉 ESRI Configuration Utility: IBFS	:/EDA/EDASI	RVE/orla	n <mark>do/esric</mark> a	onfig_new.xm	l - Windows Inte	er 🔳 🗖 🔀
📓 Focexecs 🛛 🔜 Synthetic Map Servic	es 🚺 Map S	ervices	Symbols	E Bookmarks	Javascript	🔄 Settings 🛛 🕐
Synthetic map services a	re created usin	g WebFOCL	IS focexecs.		<u> </u>	
Services	Properties	Layers				
※ Ⅹ ≵ +	₩ 2+					
Name		Property		Value		
🔯 Banks	± 🛄	Active_B	anks			
	🗉 🌉	Retail_S	tores			
	🗉 🎩	Food Sto	res			
	<					>
	🏶 🗙 Att	ributes for la	ayer Active_I	Banks		
	Name	For	mat Size	e Quote		
	CERT	A20) 20	Single		
	ADDRESS	A30) 20	Single		
	CITY	A10) 20	Single		
	STALP	A20) 20	Single		
	ZIP	I9	9	None		
	Side	A30) 30	Single		
	StreetType	A30) 8	Single		
	StreetName	A30) 8	Single		
	X	A30) 30	Single		
	Y	A30) 30	Single		
<						
View XML					Save	e 🔹 🗖 Done

The Retail Predictives sample application uses a synthetic map service called Banks, which has the following synthetic layers defined:

- Active_Banks
- Retail_Stores
- Food Stores

Defining Map Services

Map services must be initially published using the ArcGIS Server Manager Console. They are considered as ArcGIS services that allow maps, features, and attribute data to be available inside client applications. Once published, map services are referenced by inbound and outbound layers. The following types of map services can be created for a Geographic Business Intelligence Solution (GBIS):

- □ **Tiled.** Have a cache of pre-rendered image tiles, which allows the ArcGIS Server to render images based on the user request.
- **Dynamic.** Must be rendered by the ArcGIS Server each time a user zooms or pans a map. Dynamic map services do not have a cache of pre-rendered image tiles.
- Geometry. Used by WebFOCUS GIS Flex Viewer to make appropriate spatial selections from a map.
- Geolocator. Finds and displays addresses on a map to see how they relate to surrounding features.

The following image shows the XML definition file (esriconfig_new.xml) being edited in the ESRI Configuration Utility. The esriconfig_new.xml file is used by the Retail Predictives sample application. In this image, the Map Services tab is selected.

ESRI Configuration Utility: IBFS:	/EDA/EDASERVE/orlando/es	riconfig_new.xml - Windows I 🔳 🗖 🔀
Synthetic Map Service	es Map Services 🔄 Symbo	ols 📔 Bookmarks 🖳 🖳 Javascript 🛛 🔄 Settings
Map Services are referen	iced by the inbound or outbound la	yers.
Services	Properties	
* 🗙 🛃	2+	
Name	Property	Value
interview orlando_base_new	Label	orlando_base_new
B Geometry	Туре	Tiled
K census zip	Path	http://ibigis10.ibi.com:8399/arcgis/rest/servic
Blkgrp_centroid	Visible	Yes
	Alpha	1
	Icon	com/esri/solutions/flexviewer/assets/images/i
<	<	
View XML		Save 🔻 Done

The Retail Predictives sample application uses the following map services:

Tiled

orlando_base_new

Dynamic

- census_zip
- blkgrp_centroid

Geometry

Geometry

Geolocator

NLGeocoder

Defining Symbols

Symbols are used to display features or entities on a map. For point features, use Marker symbols. For line features, use Line symbols. For polygon features, use Fill symbols. Other symbols that can be created are Callout and Text symbols to display contextual text.

The following image shows the XML definition file (esriconfig_new.xml) being edited in the ESRI Configuration Utility. The esriconfig_new.xml file is used by the Retail Predictives sample application. In this image, the Symbols tab is selected.

🖉 ESRI Configuration Utility: IBFS	:/EDA/EDASERVE/orlando/	/esriconfig_new.xml - Windows Internet 🗐 🗖 🔀
🔯 Focexecs 🛛 🔜 Synthetic Map Servic	ces 🛛 🛐 Map Services 🛛 🔯 Sy	rmbols 📴 Bookmarks 🖳 🖳 Javascript 🛛 🖾 Settings 🛛 🥹
Symbols that are used to 1. For point features use 2. For line features use 3. For polygon features Other symbols that can b	o display features or entities on a e Marker Symbols Line Symbols use Fill Symbols be created are callout and text s	a map: symbols to display contextual text.
Symbols	Properties	
* X 2*	2*	
Prompt	Property	Value
selectMapLine	Prompt	selectMapLine
drawMapLine	Java Class	com.esri.aas.symbol.SimpleLineSymbol
selectMapPolygon	Alaba	Default
drawMapPolygon	Alpila	
MapPolyOther	Color	rgb(0,0,255)
MapPoint Contemporation	Width	5
	Style	dot
defaultOther		
symEood		
symCallout		
symCallout2		
symCallout		
		>
View XML		Save 🔻 Done

The Retail Predictives sample application uses the following symbols. The Java Class being used by each symbol is also listed.

selectMapLine

com.esri.ags.symbol.SimpleLineSymbol

drawMapLine

com.esri.ags.symbol.SimpleLineSymbol

selectMapPolygon

com.esri.ags.symbol.SimpleFillSymbol

drawMapPolygon
com.esri.ags.symbol.SimpleLineSymbol
drawMapPolyOther
com.esri.ags.symbol.SimpleLineSymbol
drawMapPoint
com.esri.ags.symbol.SimpleMarkerSymbol
selectMapPoint
com.esri.ags.symbol.SimpleLineSymbol
defaultOther
com.esri.ags.symbol.SimpleLineSymbol
symColorByBusiness
com.esri.ags.symbol.SimpleFillSymbol
symBankPoint
com.esri.ags.symbol.PictureMarkerSymbol
symStores
com.esri.ags.symbol.SimpleLineSymbol
symFood
com.esri.ags.symbol.SimpleLineSymbol
symHighlight
com.esri.ags.symbol.SimpleFillSymbol
symCallout
<pre>com/ibi/flexviewer/externalsymbol/TextCalloutArea.swf</pre>
symCallout2

com/ibi/flexviewer/externalsymbol/TextCalloutArea.swf

Procedure: How to Configure a New Symbol Definition

To configure a new symbol definition:

1. Click the Symbols tab located at the top of the ESRI Configuration Utility, as shown in the following image.

📴 Focexecs 🛛 🎩 Synthetic Map Service	s 🛛 📓 Map Services 🛛 🔄	Symbols 📘 Bookmarks 🖳 Javascript 🔄 Settings 🥝 🥝			
Symbols that are used to display features or entities on a map: 1. For point features use Marker Symbols 2. For line features use Line Symbols 3. For polygon features use Fill Symbols Other symbols that can be created are callout and text symbols to display contextual text.					
Symbols	Properties				
💥 🗙 🛃	2+				
Property Value					
Prompt selectMapLine					
Java Class com.esri.ags.symbol.SimpleLineSymbol					

2. Click New Symbol in the left pane.

The Create a new symbol entry dialog opens, as shown in the following image.

Create a new symbol entry	
Prompt:	
symHighlight	
Java Class:	
com.esri.ags.symbol.SimpleFillSymbol	
com.esri.ags.symbol.SimpleLineSymbol	
com.esri.ags.symbol.CartographicLineSymbol	
com.esri.ags.symbol.SimpleFillSymbol	
com.esri.ags.symbol.PictureFillSymbol	
com.esri.ags.symbol.SimpleMarkerSymbol	
com.esri.ags.symbol.PictureMarkerSymbol	
com.esri.ags.symbol.TextSymbol	
com.esri.ags.symbol.CompositeSymbol	

3. Enter a unique name for the new symbol in the Prompt field (for example, symHighlight).

4. Choose the Java class you wish to use for your new symbol definition from the drop-down list (for example, com.esri.ags.symbol.SimpleFillSymbol).

Create a new symbol entry
Prompt:
symHighlight
Java Class:
com.esri.ags.symbol.SimpleFillSymbol
< <u>B</u> ack Finish Cancel

5. Click Finish.

The new symbol definition (for example, symHighlight) is added to the Symbols pane in the ESRI Configuration Utility, as shown in the following image.

Symbols	Properties			
* 🗙 🛃	2.			
Prompt	Property	Value		
selectMapLine	Prompt	symHighlight		
🔄 drawMapLine	Java Class	com.esri.ags.symbol.SimpleFillSymbol		
selectMapPolygon				
🛃 drawMapPolygon	Outline	Default		
🛃 drawMapPolyOther	Alpha	Default		
🛃 drawMapPoint	Color	Default		
selectMapPoint	Chila	Dafault		
defaultOther	Style	Default		
🛃 symHighlight				

The Properties tab lists the available configuration properties for the symbol definition, which are specific to the Java class. For example, the following table lists and describes the configuration properties that are specific to the Simple Fill Symbol (com.esri.ags.symbol.SimpleFillSymbol) Java class. Enter the configuration properties for the new symbol definition (symHighlight), as listed in the following table.

Property	Description
Prompt	The unique name for the symbol definition that was entered in the Prompt field of the Create a new symbol entry dialog.
Java Class	The specific Java class that is associated with the new symbol definition.
Outline	The type of outline to be used. Select an available line symbol definition from the drop-down list.
Alpha	Fill symbol transparency level.
Color	Allows you to select a color to be used for the symbol from a color palette dialog. You can also set the color value as transparent. rgb(255,0,128)
Property	Description
----------	---
Style	The type of style to be applied for the symbol definition. You can select a value from the drop-down list. The available set of style values are directly related to the symbol definition. For example, for Simple Fill Symbol, the following styles are available:
	backward diagonal lines
	diagonal cross
	forward diagonal lines
	horizontal lines
	no fill
	□ solid
	vertical lines
	solid

For example:

📴 Focexecs 🛛 🎩 Synthetic Map Service	s 🛛 🛐 Map Services 🖉 Symb	ools 📴 Bookmarks 🛛 🛂 Javascript 🛛 🖾 Settings						
Symbols that are used to display features or entities on a map: 1. For point features use Marker Symbols 2. For line features use Line Symbols 3. For polygon features use Fill Symbols Other symbols that can be created are callout and text symbols to display contextual text. Symbols Properties								
× ∧ z*	Z*							
Prompt	Property	Value						
selectMapLine	Prompt	symHighlight						
🔄 drawMapLine	Java Class	com esri ags symbol SimpleFillSymbol						
selectMapPolygon		connearnagaraymbonampier nio ymbor						
🚰 drawMapPolygon	Outline	Default						
🛃 drawMapPolyOther	Alpha	0.5						
🛃 drawMapPoint	Color	rab(255.0, 128)						
selectMapPoint	Chulo	aolid						
🛃 defaultOther	Эсую	Solid						
🔄 symHighlight								

Note: For more information on the configuration properties that are available for the supported symbol Java classes, see the *WebFOCUS Adapter for Geographic Information Systems: ESRI ArcGIS Server and ArcGIS Flex API* documentation.

Understanding Replaceable Parameters

This section describes how WebFOCUS report columns can be bound to a symbol using a replaceable parameter (for example, COLOR).

In the sample application being used in this tutorial, the Color by Predictive Sales Map FOCEXEC (mp_sales.fex) uses shades of color on the map to represent predicted sales across the region, which are identified by Federal Information Processing Standard (FIPS) codes.

The Color by Predictive Sales Map FOCEXEC (mp_sales.fex) has an outbound layer configured, which uses the following symbol:

symColorByBusiness

The following image shows the properties for this symbol (symColorByBusiness).

Properties	
² →	
Property	Value
Prompt	symColorByBusiness
Java Class	com.esri.ags.symbol.SimpleFillSymbol
Outline	Default
Alpha	0.5
Color	Variable: color
Style	solid

Notice that the Color property is set to the *color* variable.

The following image shows the properties for the outbound layer that is defined for the Color by Predictive Sales Map FOCEXEC (mp_sales.fex).

Focexecs	Propert	ies Inbound Layers Outbou	nd Layers
* 🗙 🛃	※ ⊉ +		
Description		Property	Value
📴 Display Banks	Θ 🏭	blkgrp	
Display Sales by Parameters		Location	http://ibigis10.ibi.com:8399/arcgis/rest/services/orlando_base_new/MapServer/2
Color by Business Type		Attribute Names	EIDS
Color by Predictive Sales		Attribute names	
Total Predicted Sales - Graph		Symbol	symColorByBusiness
Predicted Sales of selected Fips		Callout Symbol	None
Detailed Report		Fex Column Name	FIPS
Map drill down		Image	
Eood Supermarket Count Report		Label Field	
Display Blockgroup Chart Predictives			
		Rollover	No
		Color	COLOR
		Shape	
		Size	
		Text	
		Title	
		Other Symbol	None
		Text Symbol	None
		Polygon Text Symbol	None
		Grid Display Info Field	
		Color Table	
	<		

Notice that the Symbol property is set to *symColorByBusiness* and the Color property is set to *COLOR*.

The following image shows a snapshot of the syntax that is used for the Color by Predictive Sales Map FOCEXEC (mp_sales.fex).

```
-* File rp_sales.fex
TABLE FILE RETAIL
-*BY LOWEST RETAIL PREDICTIVES.RETAIL PREDICTIVES.BUSTYPE
-*WHERE RECORDLIMIT EQ 100
-*WHERE RETAIL PREDICTIVES.RETAIL_PREDICTIVES.FIPS EQ (&FIPSLIST);
SUM
     RETAIL.RETAIL.PREDICTED SALES
     MAX.RETAIL.RETAIL.PREDICTED SALES AS 'MAX SALES'
     FST.RETAIL.RETAIL.SEASON
    FST.RETAIL.RETAIL.BUSTYPE AS 'BUSINESS TYPE'
    FST.RETAIL.RETAIL.TIMEPERIOD AS 'TIME PERIOD'
    RETAIL.RETAIL.SALES
    COMPUTE COLOR/A20 = IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 3500 THEN 'RED'
    ELSE IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 3300 THEN '25,69,0'
     ELSE IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 3200 THEN 'ORANGE'
    ELSE IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 3100 THEN '255,215,0'
    ELSE IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 3000 THEN '25,140,0'
    ELSE IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 2800 THEN '205,105,57'
    ELSE IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 2600 THEN '227,207,87'
     ELSE IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 2200 THEN '85,47,107'
     ELSE IF MAX.RETAIL.RETAIL.PREDICTED SALES GE 2000 THEN '173,255,47'
     ELSE '220,220,220';
```

Results of the following logic is used by the *symColorByBusiness* symbol (through the *color* variable) to determine the color of the shaded regions on the generated map based on predicted sales.

```
COMPUTE COLOR/A20 = IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 3500 THEN 'RED'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 3000 THEN '25,69,0'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 3200 THEN 'ORANGE'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 3100 THEN '255,215,0'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 3000 THEN '25,140,0'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 2800 THEN '25,140,0'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 2800 THEN '205,105,57'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 2600 THEN '227,207,87'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 2000 THEN '85,47,107'
ELSE IF MAX.RETAIL.RETAIL.PREDICTED_SALES GE 2000 THEN '173,255,47'
ELSE '220,220,220';
```

Defining Custom JavaScript

The ESRI Configuration Utility allows you to write your own JavaScript syntax that can be referenced by the XML definition file. You can also specify whether the custom JavaScript syntax should be used with maps and/or reports by selecting the corresponding check boxes.

The following image shows the XML definition file (esriconfig_new.xml) being edited in the ESRI Configuration Utility. The esriconfig_new.xml file is used by the Retail Predictives sample application. In this image, the Javascript tab is selected.

🖉 ESRI Configuration Utility: IBFS:/EDA/EDASERVE/orlando/esriconfig_new.xml - Windows Internet Explo 🗐 🔲 🔀
📴 Focexecs 🛾 🔜 Synthetic Map Services 🗍 📑 Map Services 🗍 🔄 Symbols 🗎 🧧 Bookmarks 🛛 🖳 Javascript 🛛 🔄 Settings 🛛 🕖
Custom Javascript code used to customize the GIS Adapter.
Code Section Code
🔆 🗙 🛃 🔽 Use with maps 🗹 Use with reports
Name Section 1 function RunMyMapOutput(strParms,value,fexId)
<pre>{ //debugger; objParms = getArgsObjectFromString(strParms,value); //alert (strParms); var getMapViewerWindow = window.top.frames["mapWindowLEAflex"]; getMapViewerWindow.jsClearMap(null,null,true,true); getMapViewerWindow.jsRunFex(fexId,false,objParms); getMapViewerWindow.focus(); }</pre>
<pre>function getArgsObjectFromString(strParms,value) {</pre>
View XML Save 🔻 Done

The Retail Predictives sample application uses the following custom JavaScript syntax:

```
function RunMyMapOutput(strParms,value,fexId)
{
    //debugger;
    objParms = getArgsObjectFromString(strParms,value);
    //alert (strParms);
    var getMapViewerWindow = window.top.frames["mapWindowLEAflex"];
    getMapViewerWindow.jsClearMap(null,null,true,true);
    getMapViewerWindow.jsRunFex(fexId,false,objParms);
    getMapViewerWindow.focus();
}
function getArgsObjectFromString(strParms,value)
{
    var args = new Object();
    args[strParms] = value;
    return args;
    }
```

Launching the WebFOCUS GIS Viewer for Flex

After you have completed the configuration of the XML definition file (for example, esriconfig_new.xml) for your application using the ESRI Configuration Utility, you must create an HTML file, which will be used to call the WebFOCUS GIS Viewer for Flex.

WebFOCUS App Studio provides direct integration with the WebFOCUS GIS Viewer for Flex and allows you to create an HTML file where you can add all of the numerous controls, report objects, and map objects for your application.

To launch the GIS Viewer from WebFOCUS App Studio, open the HTML canvas. On the *Components* tab, in the *Objects* group, click *GIS Flex Viewer*, as shown in the following image.



For more information, see the App Studio online Help.

You can then drag the crosshair to the desired size for the WebFOCUS GIS Viewer for Flex controls and report. The WebFOCUS GIS Viewer for Flex component will contain a number of controls, a report, and a map object. It is recommended that the WebFOCUS GIS Viewer for Flex component be drawn large enough to accommodate all of these items.

You will then choose the XML definition file (for example, esriconfig_new.xml) to use with the WebFOCUS GIS Viewer for Flex component.

The following line must be present in your XML definition file for you to pass parameters from the controls to the map object and from the map object to the report.

```
<callback identify="parmcollect" map="IBI_GetLayoutPainterParameters" report="IBI_GetLayoutPainterParameters"/>
```

The New Parameter dialog box will open and you will be able to change the options for the parameters contained within the WebFOCUS GIS Viewer for Flex component. The WebFOCUS GIS Viewer for Flex component will then be inserted into the HTML page.

Note: Controls and reports within the WebFOCUS GIS Viewer for Flex can be chained. Maps within the WebFOCUS GIS Viewer for Flex component cannot be chained.

Flushing Tables

To ensure that the latest configuration changes are reflected in your application, you must flush the tables each time you edit XML definition files. You can enter the following URL to flush tables:

```
http://server:port/ibi_apps/esri/WfArcConnector.jsp?
IBIESRI_command=flushtables
```

where:

server

Is the name of the server on which WebFOCUS is installed.

port

Is the number of the port on which the server is listening.

The following message is displayed in your web browser to confirm that the flushtables command was executed:





Tips and Usage Considerations

This section provides a selection of tips and usage considerations for the WebFOCUS Adapter for Geographic Information Systems.

In this chapter:

Creating Rollovers

Creating Rollovers

This section describes how to create rollovers using the ESRI Configuration Utility. Rollovers are useful interactive features that can be used to display additional information about key points on a map.

Procedure: How to Create Rollovers

- 1. Create a Map FOCEXEC in the Focexecs tab.
- 2. Add an outbound layer.

For more information on creating outbound layers, see the *WebFOCUS Adapter for Geographic Information Systems: ESRI ArcGIS Server and ArcGIS Flex API* documentation.

3. Click the *Focexecs* tab located at the top of the ESRI Configuration Utility and then click the *Outbound Layers* tab.

4. In the Outbound Layers tab, select Yes for the Rollover property, as shown in the following image.

🏉 ESRI Configuration Utility: I	BFS:/EDA/EDASER	VE/splych	ain/esriconfig.>	anl - Windows Internet Explorer 📃	
Focexecs 🕹 Synthetic Map Service	s 📔 Map Services	Symbo	ils 📔 🔛 Bookmarks	s 🛛 🛂 Javascript 🛛 🔄 Settings	0
The WebFOCUS GIS Ada These are called fexes ar	pter uses standard FC id can be one of three	CUS languag types: repor	e commands to acc t, identify, or map.	mplish the integration between WebFOCUS and ArcGIS 5	erver.
Focexecs	Properties Inbo	und Layers	Outbound Layers		
* X 💱	∻ 2 +				
Description	Property		Value		•
Quake effected Suppliers	🖯 🖶 Suppliers	F .			
M Identify Plants	Location		http://ibigi	s10.ibi.com:8399/arcgis/rest/services/splychain_events/M	
State Suppliers	Attribute	Names	SUPLR_ID		
Alternative Suppliers - Dynamic	Symbol		None		
Supplier Listing	Callout S	Callout Symbol			
Suppliers #3	Fex Column Name		SUPLR_ID		
	Image		SUPL_IMA	GE	
	Label Fie	ld			
	Rollover		Yes		
	Color		SUPL_COL	SUPL_COLOR	
	Shape		SUPL_SHA	PE	
	Size		SUPL_SIZE		
	Text		SUPL_TITL	ε	
	Title		SUPL_TITL	ε	
	Other Sy	mbol	None		
	Text Syn	nbol	None		
	Polygon	Text Symbo	None		
	Grid Disp	lay Info Fiel	d		
<. u	Color Tal	ole			~
View XML				Save 🔹	one

5. Click the *Javascript* tab and create a new JavaScript function (for example, SymbolMouseEvent).

📓 Focexecs 🛛 🎩 Synthetic Map Servic	es 🛙 📳 Map Services 🛛 📓 Symbols 🛛 📓 Bookmarks 🛛 🛂 Javascript 🛛 📓 Settings 🖉 🥹
LavaScript Custom Javascript code t	used to customize the GIS Adapter.
Code Section	Code
* 🗙 🐉	Use with maps V Use with reports
Name	<pre>// Enter javascript code here: function SymbolMouseEvent(type,fexId,layerId,x,y,p, currentGraphicJSON,extent(</pre>
	<pre>switch(type) {</pre>
View XML	Save 🔹 Done

The following syntax provides a sample of the SymbolMouseEvent JavaScript function that you can use:

```
function SymbolMouseEvent(type,fexId,layerId,x,y,p,
currentGraphicJSON, extentGraphicJSON)
         var div = document.getElementById('rollOverTextDiv');
         var windowName = "_new" ;
         var esriObject = getWfEsriObject();
         var mapWindowName = esriObject.getFexById(fexId).getWindow();
         var reportWindowName =
esriObject.getFexById("fex2").getWindow();
 // just some report to get windowname
         if(fexId == "fex0")
                  windowName = reportWindowName;
         switch(type)
                 case "close" :
                 case "mouseOut" :
                 div.style.display = "none";
                 div.style.left = -100;
                 div.style.top = -100;
                 break;
         case "click" :
         case "rollOver" :
                 div.style.display = "inline";
                 div.style.left = x;
                 div.style.top = y;
                 var s = "";
                 if(fexId == "fex11" || fexId == "fex12" || fexId ==
"fex21" || fexId == "fex22")
                  s = s + p.IBI$TEXT;
                   }
                  div.innerHTML = s;
                  break;
          case "mouseMove" :
                  div.style.left = x;
                  div.style.top = y;
                  break;
          case "mouseOver"
                            :
        break;
default :
       debugWindow(type + "," + fexId + "," + layerId);
       break;
}
```

}

In the syntax, IBI\$TEXT refers to the value that is returned from the outbound layer node in the Map FOCEXEC, as shown in the following image.

The WebPOCUS GIS Adapter uses standard FOCUS language commands to accomplish the integration between WebPOCUS and ArcGIS Server these are called fexes and can be one of three types: report, identify, or map. Focexecs Properties Inbound Layers Outbound Layers Value Property Value Property Value Property Value Oraction http://bigis10.bli.com:8399/arcgis/rest/services/splychain_events/M Attribute Names SUPLR_ID Suppliers = Dynamic Symbol None Symbol None Suppliers #3 Fex Column Name SUPLR_ID Image SUPL_IMAGE Label Field Rollover Yes Color SUPL_SIZE Itile SUPL_SIZE Size SUPL_SIZE Text SUPL_SIZE Text SUPL_SIZE Text SUPL_TITLE Title Other Symbol None Polygon Text Symbol None Orac Table Color Table Outbound Layers	🔯 Focexecs 🛛 👢 Synthetic Map Service	es 🛛 🚺 M	lap Services	🛐 Symbols 📔	🛂 Bookmarks 🛛 🛂 Javascript 🗍 🕎 Settings	Q
Focexes Properties Inbound Layers Outbound Layers Properties Inbound Layers Outbound Layers Description ** ** Inbound Layers Value Outbound Layers Value Outbound Layers Value Inbound Layers Value Outbound Layers Value Inbound Layers Value Outbound Layers Value Outbound Layers Value Inbound Layers Suppliers Suppliers Supliers Suppliers <t< td=""><td>The WebFOCUS GIS Ada These are called fexes at</td><td>pter uses : nd can be (</td><td>standard FOCU one of three tyj</td><td>5 language co pes: report, id</td><td>mmands to accomplish the integration between WebFOCUS and Arc entify, or map.</td><td>GIS Server.</td></t<>	The WebFOCUS GIS Ada These are called fexes at	pter uses : nd can be (standard FOCU one of three tyj	5 language co pes: report, id	mmands to accomplish the integration between WebFOCUS and Arc entify, or map.	GIS Server.
* * * * Description Property Value © Location http://bigis10.ibi.com:8399/arcgis/rest/services/splychain_events/M © Suppliers - Dynamic Symbol None © Label Field Image SUPL_IDA Image SUPL_STAPE Size Size SUPL_STAPE Size Size SUPL_STAPE Size Itext Symbol None Text Symbol Polygon Text Symbol None Polygon Text Symbol © Color Table Color Table Color Table	Focexecs	Propert	ties Inbound	Layers Out	bound Layers	
Description Property Value Quake effected Suppliers Suppliers Suppliers Calcotify Plants Location http://bigis10.ibi.com:8399/arcgis/rest/services/splychain_events/M State Suppliers Attribute Names SUPL_ID Supplier Listing Symbol None Suppliers #3 Fex Column Name SUPL_ID Image SUPL_ID Image SUPL_ID Image SUPL_ID Image SUPL_ID Image SUPL_ID Image SUPL_SHAPE	* X 🛂	* 2+				
Image: Suppliers Suppliers Identify Suppliers Indentify Suppliers Image: Suppliers #3 Symbol Image: Suppliers #3 Image: Suppliers Image: Suppliers #3 Suppliers Image: Suppliers #3 Image: Suppliers Image: Suppliers #3 Suppliers Image: Suppliers #3 Image: Suppliers Image: Suppliers #3 Suppliers Image: Suppliers Suppl	Description		Property		Value	^
Identify Suppliers Iccation http://bigis10.ibi.com:8399/arcgis/rest/services/splychain_events/M Identify Plants Attribute Names SUPLR_ID Supplier is string Symbol None Suppliers #3 Fex Column Name SUPLR_ID Image SUPLR_ID Image Image Suplication Ves Color SuplIMARE SuplSHAPE Size SuplSHAPE Size Image SupL_ITILE Text Image SuplSHAPE Size Image SuplSHAPE SuplSHAPE Image Supl_	Quake effected Suppliers	ه الله	Suppliers			
Image: Supplers Attribute Names SUPLR_ID Suppler Listing Symbol None Supplers #3 Fex Column Name SUPLR_ID Image SUPL_IMAGE Image SUPL_IMAGE Image SUPL_SUPL	Mildentify Suppliers		Location		http://ibigis10.ibi.com:8399/arcgis/rest/services/splychain_even	nts/M
Alternative Suppliers - Dynamic Symbol None Supplier Listing Callout Symbol None Suppliers #3 Fex Column Name SUPLR_ID Image SUPL_IMAGE Color SUPL_COLOR Shape SUPL_SHAPE Size SUPL_SIZE Title SUPL_TITLE Other Symbol None Other Symbol None Grid Display Info Field None Color Table Olor	State Suppliers		Attribute Na	mes	SUPLR_ID	
Supplier Listing Callout Symbol None Suppliers #3 Fex Column Name SUPLR_ID Image SUPLR_ID Image SUPL_IMAGE Color SUPL_COLOR Shape SUPL_SHAPE Size SUPL_SIZE Title SUPL_TITLE Other Symbol None Polygon Text Symbol None Roid Oisplay Info Field Color Table Color Table 	Alternative Suppliers - Dynamic		Symbol		None	
Suppliers #3 Fex Column Name SUPL_ID Image SUPL_IMAGE Label Field Rollover Yes Color SUPL_COLOR Shape SUPL_SHAPE Size SUPL_SIZE Title SUPL_TITLE Other Symbol None Polygon Text Symbol None Grid Display Info Field Color Table	Supplier Listing		Callout Sym	bol	None	
Image SUPL_IMAGE Label Field Rollover Yes Color SUPL_COLOR Shape SUPL_SHAPE Size SUPL_SIZE Title SUPL_TITLE Other Symbol None Polygon Text Symbol None Grid Display Info Field	Suppliers #3		Fex Column Name SUPLR_ID		SUPLR_ID	
Image: Color Superior			Image		SUPL_IMAGE	
Rollover Yes Color SUPL_COLOR Shape SUPL_SHAPE Size SUPL_SIZE Text SUPL_TITLE Other Symbol None Polygon Text Symbol None Grid Display Info Field Color Table			Label Field			
Color SUPL_COLOR Shape SUPL_SHAPE Size SUPL_SIZE Text SUPL_TITLE Other Symbol None Polygon Text Symbol None Grid Display Info Field Color Table			Rollover		Yes	
Shape SUPL_SHAPE Size SUPL_SIZE Text SUPL_TITLE Other Symbol None Text Symbol None Polygon Text Symbol None Grid Display Info Field Color Table			Color		SUPL_COLOR	
Size SUPL_SIZE Text SUPL_TITLE Title SUPL_TITLE Other Symbol None Text Symbol None Polygon Text Symbol None Grid Display Info Field Color Table			Shape		SUPL_SHAPE	
IBI\$TEXT Text SUPL_TITLE Title SUPL_TITLE Other Symbol None Text Symbol None Polygon Text Symbol None Grid Display Info Field Color Table			Size		SUPL_SIZE	
Title SUPL_TITLE Other Symbol None Text Symbol None Polygon Text Symbol None Grid Display Info Field Color Table	IBIŚTEXT		Text		SUPL_TITLE	
Other Symbol None Text Symbol None Polygon Text Symbol None Grid Display Info Field Color Table			Title		SUPL_TITLE	
Text Symbol None Polygon Text Symbol None Grid Display Info Field Color Table			Other Symb	ol	None	
Polygon Text Symbol None Grid Display Info Field Color Table			Text Symbo	1	None	
Grid Display Info Field Color Table			Polygon Tex	t Symbol	None	
Color Table			Grid Display	Info Field		
	< [m] >		Color Table			~
			:			

Note: Rollovers can also contain HTML text.

6. Click the Settings tab located at the top of the ESRI Configuration Utility and then click the *Miscellaneous* tab.

7. Enter the name of the JavaScript function that must be called (for example, SymbolMouseEvent) in the Rollover callback field, as shown in the following image.

E Foce	execs 🛛 🎩 Synthetic Map Servi	tes 🛛 📳 Map Services 🛛 🔯 Symbols 🛛 🔽 Bookmarks 🛛 💁 Javascript 🛛 🔯 Settings	0
Į	Application settings used	I to configure the map viewer performance.	
Display	Info Windows Miscellaneou	5	
2÷			
	Property	Value	^
	Application path	IBFS:/EDA/EDASERVE/splychain	
	Error Page	/ibi_html/javaassist/ibi/html/esri/esri_error.htm	
0 🖾	Callback		
	Identify		
	Мар		
	Report		
	Map init		
	Report init		
	Rollover callback	SymbolMouseEvent	
- 11	Performance		
	Append to fex prompt	No	
	Cache DOM	Yes	
	Cache filter	Yes	
	Cache JavaScript	Yes	
	Check ESC	Yes	_
	Enable debug window	Yes	_
	Filter format	in	
	Focus temp	ТХТ	_
	FTM	txt	•
View XML		Save V Do	ne

8. Click Save to save the changes that were made to the XML definition file.



Additional Resources

This section provides additional resources for the WebFOCUS Adapter for Geographic Information Systems.

In this chapter:

- Reference Documentation
- ESRI Resources

Reference Documentation

For more information on configuring and using the WebFOCUS Adapter for Geographic Information Systems, see the WebFOCUS Adapter for Geographic Information Systems: ESRI ArcGIS Server and ArcGIS Flex API documentation.

ESRI Resources

For more information on ArcGIS resources, visit the following website:

http://resources.arcgis.com/en/home/

For more information on ArcGIS Server, visit the following website:

http://resources.arcgis.com/en/help/getting-started/articles/026n00000007000000.htm

Feedback

Customer success is our top priority. Connect with us today!

Information Builders Technical Content Management team is comprised of many talented individuals who work together to design and deliver quality technical documentation products. Your feedback supports our ongoing efforts!

You can also preview new innovations to get an early look at new content products and services. Your participation helps us create great experiences for every customer.

To send us feedback or make a connection, contact Sarah Buccellato, Technical Editor, Technical Content Management at Sarah_Buccellato@ibi.com.

To request permission to repurpose copyrighted material, please contact Frances Gambino, Vice President, Technical Content Management at *Frances_Gambino@ibi.com*.



WebFOCUS

WebFOCUS Adapter for Geographic Information Systems Getting Started Release 8.2 Version 02

Information Builders, Inc. Two Penn Plaza New York, NY 10121-2898 DN4501636.1217