

2009

ESRI Developer Summit

March 23–26, 2009 ♦ Palm Springs, CA

www.esri.com/devsummit

```
type="text/javascript"></script>
```

```
var graphic = new esri.Graphic(evt.mapPoint,pointSymbol);
```

```
layers.ArcGISTiledMapServiceLayer;
```

```
fc.FeatureType == esriFeatureType.esriFTSimple)
```

```
String user = "user1
```

```
serverObjectExtensionManager) mapserver;
```

```
using ESRI.ArcGIS.Geometry
```

```
//serverapi.arcgisonline.com/jsapi/arcgis/?v=1.2"
```



Welcome



Dear Developers:

It is my pleasure to welcome you to Palm Springs for the fourth annual ESRI Developer Summit (DevSummit). This summit is for you—the developer—to help you leverage the ArcGIS® platform to build creative, practical, and effective solutions for your organization and customers.

I want this summit to be really useful for you. With that in mind, ESRI development teams have taken great care to organize and present the topics that you want to know more about. They will be sharing their work and will want to learn more about yours. The goal is to create an interactive exchange throughout the developer community that will advance the projects you are working on and help ESRI evolve our technology to support you in the future.

In the Plenary Session, we will show you the key aspects of ArcGIS 9.3.1 including faster dynamic map publishing, new search and share capabilities with ArcGIS Online, and improved APIs across the ArcGIS system. I am also very excited about the technical sessions, which are organized around core development, enterprise solutions, and methods for migrating desktop applications to ArcGIS Server.

Of course, throughout the conference, ESRI development teams will be accessible to discuss your questions or concerns. Likewise, I invite you to spend time in the GIS Solutions EXPO and ESRI Showcase to discover contacts and resources that can help you deploy your geospatial applications.

I hope you have a great time in Palm Springs and wish you all the best.

Sincerely,

A handwritten signature in black ink that reads "Jack Dangermond". The signature is stylized and cursive.

Jack Dangermond
President

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Community Center Information**
*Primrose Lobby
Palm Springs Convention
Center (PSCC)*

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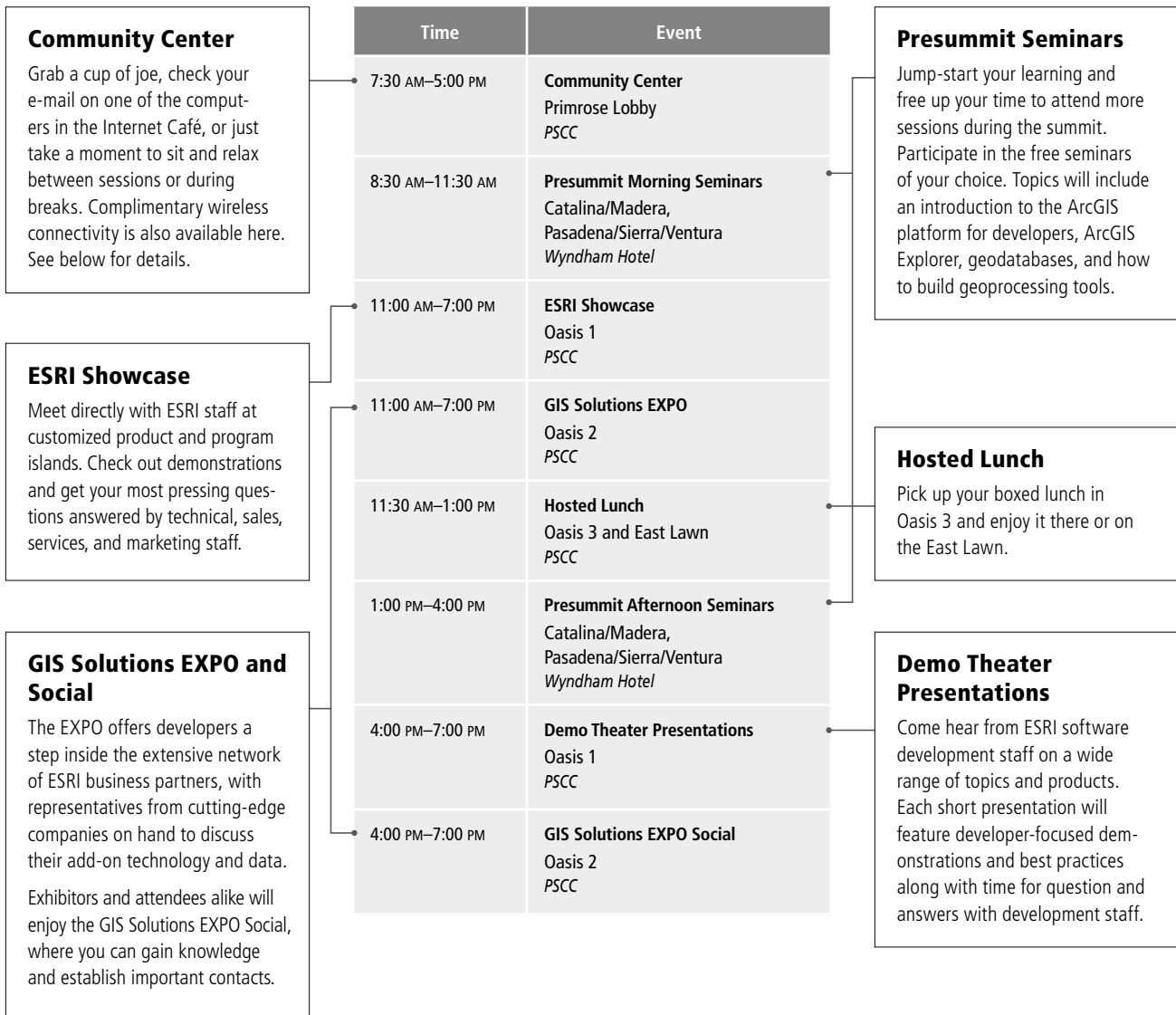
Recycle Badges

At the end of the summit, please place your name badge holder in the badge recycle box located at the Registration Desk or in any of the survey drop boxes.

Thank you for your cooperation.

Summit at a Glance

Monday, March 23



Wireless Connectivity Information (Community Center)

Network Name (SSID): **ESRI_EVENTS**

Network Authentication: **Open**

Data Encryption: **None**

Authentication: **None**

Connection: **Connect when this network is in range**

If you need additional information, please go to the Registration Desk in the Community Center or the ArcGIS Info Desk in the ESRI Showcase.

Tuesday, March 24

Plenary Session

Learn about key aspects of the ArcGIS 9.3.1 release including faster dynamic map publishing, new search and share capabilities with ArcGIS Online, and the improved APIs across the ArcGIS system.

Also get a glimpse of current development projects included with ArcGIS 9.4—presented by the teams that are building them.

Hosted Lunch

Sit down to a plated lunch in Oasis 2 or on the Primrose Esplanade.

Technical Sessions

Discover the most recent developer information during the wide variety of summit technical sessions. Receive expert guidance from ESRI engineers that relates to your daily programming and see code in the sessions presented by ESRI developers. Explore a wide range of offerings ranging from core GIS concepts to customizing and extending GIS programs.

Sponsor Spotlight

Take a look at the software solutions of DevSummit sponsors on Tuesday night. See how important companies are integrating with ESRI and making tools you need.

Sponsor	Location
Microsoft	Primrose A
IBM	Primrose B
Adobe	Primrose C/D

Time	Event
7:30 AM–6:00 PM	Community Center Primrose Lobby PSCC
8:30 AM–11:45 AM	Plenary Session Oasis 4 PSCC
11:45 AM–1:00 PM	Hosted Lunch Oasis 2 and Primrose Esplanade PSCC
12:30 PM–6:00 PM	ESRI Showcase Oasis 1 PSCC
1:15 PM–5:30 PM	Meet the Teams Oasis 1 PSCC
1:00 PM–5:45 PM	User Presentations Oasis 1 PSCC
1:00 PM–5:45 PM	Technical Sessions Primrose A–D, Mesquite C, Smoketree A–E PSCC Catalina/Madera, Pasadena/Sierra/Ventura Wyndham Hotel
1:00 PM–6:00 PM	Demo Theater Presentations Oasis 1 PSCC
6:00 PM–7:00 PM	Sponsor Spotlight Primrose A–D PSCC

Meet the Teams

Come together for 30 minutes with ESRI staff specializing in different areas of the ArcGIS product suite and developer skills. Get face time with members of our development teams including staff focused on ArcGIS SDK, ArcGIS Online, and ArcGIS Explorer; mapping and visualization; CAD; network and logistics; geodatabase editing; and online developer communities.

User Presentations

The developers who are designing, building, and implementing GIS-based applications and systems are important contributors to the summit. Head to this portion of the ESRI Showcase to hear from your peers as they share their work in 25- to 30-minute live presentations. Explore the experience, ideas, and achievements of your fellow developers. Examine complete applications and discuss development practices and coding techniques using ESRI's or other's APIs. Some of the topics covered will include useful tools and functions you can code share, coding conventions, testing techniques, update practices, and integration of ESRI technologies with other third-party technologies.

Summit at a Glance

Wednesday, March 25

Keynote Session

SOAP vs. REST: Complementary or Competitive?

Two approaches to creating Web services are in use today, and both have ardent fans. One, using SOAP and the WS-* specifications, follows in the footsteps of earlier distributed computing technologies. The other, the RESTful style, is explicitly based on the principles of the Web itself. Which is better? David Chappell, Principal, Chappell and Associates, searches for the answer in this keynote presentation.

Hosted Lunch

Pick up your boxed lunch in Oasis 2 and enjoy it there or on the East Lawn.

DevSummit Party

Enjoy an evening of good food and good company at the DevSummit Party on Wednesday night. Chat with other attendees and find the ESRI staff you've been wanting to converse with.

Meet the Teams continues during the party from 6:00 PM to 7:00 PM.

- Java (ArcGIS Server and ArcGIS Engine)
- ArcGIS Server JavaScript and Flex
- ArcGIS Server .NET ADF and Silverlight

Time	Event
7:30 AM–6:00 PM	Community Center Primrose Lobby PSCC
8:30 AM–10:00 AM	Keynote Session Oasis 4 PSCC
10:00 AM–4:30 PM	ESRI Showcase Oasis 1 PSCC
10:00 AM–5:00 PM	Demo Theater Presentations Oasis 1 PSCC
10:00 AM–4:45PM	User Presentations Oasis 1 PSCC
10:30 AM–11:45 AM	Technical Sessions Primrose A–D, Mesquite C, Smoketree A–E PSCC Catalina/Madera, Pasadena/Sierra/Ventura Wyndham Hotel
10:30 AM–4:30 PM	Meet the Teams Oasis 1 PSCC
NOON–1:00 PM	Hosted Lunch Oasis 2 and East Lawn PSCC
NOON–1:00 PM	Lone GIS Professional Special Interest Group Meeting Primrose A PSCC
1:00 PM–5:45 PM	Technical Sessions Primrose A–D, Mesquite C, Smoketree A–E PSCC Catalina/Madera, Pasadena/Sierra/Ventura Wyndham Hotel
6:00 PM–9:00 PM	DevSummit Party Oasis 2 and 3 PSCC

Lone GIS Professional Special Interest Group Meeting

Discuss the progress and direction of this important initiative that brings GIS professionals together to be more successful. Learn the latest about benefiting from and contributing to this helpful program's activities. (For more information, see session descriptions.)

Thursday, March 26

Time	Event
7:30 AM–2:00 PM	Community Center Primrose Lobby PSCC
8:30 AM–11:30 AM	Technical Sessions Primrose A–D, Mesquite C, Smoketree A–E PSCC Catalina/Madera, Pasadena/Sierra/Ventura Wyndham Hotel
11:30 AM–1:00 PM	Closing Session and Lunch Oasis 4 PSCC
1:30 PM–2:45 PM	Technical Sessions Primrose A–D, Mesquite C, Smoketree A–E PSCC Catalina/Madera, Pasadena/Sierra/Ventura Wyndham Hotel

Closing Session and Lunch

Wrap up your summit experience while enjoying lunch. The Closing Session is an open forum for you to pose your questions and give your feedback to ESRI staff. Your thoughts and suggestions are very important to us, and we encourage you to share them at this time. Get the answers you need as well as review key topics discussed and ideas presented during the summit.



Stay Connected via Twitter and the DevSummit Blog

Head to the Web to check out the latest summit updates. Join the conversation on Twitter by searching for the hash tag **#devsummit**. And visit the ESRI Developer Summit Blog at www.esri.com/blogs to catch up on recent news, highlights, and fascinating finds.



When does 1 + 1 give you more than 2?

When the best of Microsoft and ESRI are paired together. By combining collaboration software from Microsoft Office SharePoint Server 2007 with the advanced geospatial capabilities of ESRI's ArcGIS Server Advanced Enterprise edition, public safety officials now have a new weapon to fight terrorism, crime and other threats.

Together, Microsoft and ESRI are bringing sophisticated collaboration and analysis capabilities to state and local fusion and operation centers. Today, we are helping drive homeland security innovations to more effectively help officials protect citizens, prevent and solve crimes, and enable counter-terrorism.

Visit www.microsoft.com/fusion for more on how to improve collaboration and intelligence analysis among law enforcement, emergency management and first-responders.

Microsoft



Monday, March 23 | Presummit Seminars Matrix

	Oasis 1 PSCC	Oasis 2 PSCC	Catalina/ Madera Wyndham Hotel	Pasadena/ Sierra/Ventura Wyndham Hotel		
8:00 AM						
9:00 AM			Presummit Seminar Introduction to ESRI's Developer Technologies <i>8:30 AM–11:30 AM</i>	Presummit Seminar Introduction to ArcGIS Explorer 900 <i>8:30 AM–11:30 AM</i>		
10:00 AM						
11:00 AM						
NOON	Hosted Lunch (Oasis 3 and East Lawn) <i>11:30 AM–1:00 PM</i>					
1:00 PM	ESRI Showcase <i>11:00 AM–7:00 PM</i>	Spatial Outlet <i>9:00 AM–5:00 PM</i>	GIS Solutions EXPO <i>11:00 AM–7:00 PM</i>	GIS Solutions EXPO Social <i>4:00 PM–7:00 PM</i>	Presummit Seminar Developer's Guide to the Geodatabase <i>1:00 PM–4:00 PM</i>	Presummit Seminar Designing and Developing Geoprocessing Tools with ArcGIS <i>1:00 PM–4:00 PM</i>
2:00 PM						
3:00 PM						
4:00 PM					Demo Theater Extending ArcLogistics <i>4:00 PM–5:00 PM</i>	
5:00 PM					Demo Theater Creating Custom Clients for the ArcGIS Server Image Extension <i>5:00 PM–6:00 PM</i>	
6:00 PM					Demo Theater ArcGIS Business Analyst Server <i>6:00 PM–7:00 PM</i>	

Tuesday, March 24 | Sessions Matrix

Oasis 1 PSCC					
8:00 AM			Plenary Session (Oasis 4, PSCC) 8:30 AM–11:45 AM		
9:00 AM					
10:00 AM					
11:00 AM					
NOON			Hosted Lunch (Oasis 2 and Primrose Esplanade, PSCC) 11:45 AM–1:00 PM		
1:00 PM	ESRI Showcase 12:30 PM–6:00 PM	Spatial Outlet 9:00 AM–5:00 PM	Demo Theater Building SharePoint Web Parts with the Web ADF 1:00 PM–2:00 PM	User Presentation Building RESTful Apps and Services Using MVC 1:00 PM–1:45 PM	Meet the Teams ArcPad 1:15 PM–1:45 PM
2:00 PM			Demo Theater ArcGIS Explorer 900 Developer: A Truly Managed Experience 2:00 PM–3:00 PM	User Presentation Philadelphia Map Plug-in: Reusable Map Control with ArcGIS API for FLEX 2:00 PM–2:45 PM	Meet the Teams Mapping and Visualization 2D and 3D 2:15 PM–2:45 PM
3:00 PM			Demo Theater Developing Real-Time Applications with Tracking Analyst and Tracking Server 3:00 PM–4:00 PM	User Presentation ArcGIS, the Web, and the GPU—Advancing 3D GIS Visualization 3:00 PM–3:45 PM	Meet the Teams ArcGIS SDK 3:00 PM–3:30 PM
4:00 PM			Demo Theater Creating Custom GIS Portals Using GIS Portal Toolkit 4:00 PM–5:00 PM	User Presentation Unit Testing 101: Building Testable Applications 4:00 PM–4:45 PM	Meet the Teams Geoprocessing 4:00 PM–4:30 PM
5:00 PM			Demo Theater Developing Custom Forms and Queries for ArcPad AXF Files 5:00 PM–6:00 PM	User Presentation Dynamically Creating and Deleting Map Services and Layers Using VB.NET and ArcGIS Server 5:00 PM–5:45 PM	Meet the Teams ArcGIS Explorer 5:00 PM–5:30 PM
6:00 PM					

	Primrose A PSCC	Primrose B PSCC	Primrose C/D PSCC	Mesquite C PSCC	Smoketree A–E PSCC	Catalina/ Madera Wyndham Hotel	Pasadena/ Sierra/Ventura Wyndham Hotel
8:00 AM	Plenary Session (Oasis 4, PSCC) 8:30 AM–11:45 AM						
9:00 AM							
10:00 AM							
11:00 AM							
NOON							
	Hosted Lunch (Oasis 2 and Primrose Esplanade, PSCC) 11:45 AM–1:00 PM						
1:00 PM	MIG Migrating VBA/ VB6 ArcObjects Applications to .NET 1:00 PM–2:15 PM	PT A Developer’s Guide to ArcGIS Server 1:00 PM–2:15 PM	PT Programming and Design Patterns for the ArcGIS Mobile API 1:00 PM–2:15 PM	APP Support Operations and Processes Presentation 1:00 PM–2:15 PM	PT Developing Java Applications with ArcGIS Engine 1:00 PM–2:15 PM	PT Developing .NET Applications for ArcGIS Engine 1:00 PM–2:15 PM	PT Effective Geodatabase Programming 1:00 PM–2:15 PM
2:00 PM	Tech Talks/Break A Tech Talk will follow each technical session. Tech Talk areas are located outside each session room. 2:15 PM–2:45 PM						
3:00 PM	MIG Moving Desktop Applications to ArcGIS Server 2:45 PM–4:00 PM	PT An Overview of the ArcGIS JavaScript APIs Offering 1 of 2 2:45 PM–4:00 PM	PT Enhancing Your Applications with ArcGIS Online 2:45 PM–4:00 PM		PT Building and Extending Tasks for ArcGIS Server—Java Web Applications 2:45 PM–4:00 PM	PT Building .NET Applications Using the ArcGIS Server Web ADF 2:45 PM–4:00 PM	PT Building Geoprocessing Tools with Python 2:45 PM–4:00 PM
4:00 PM	Tech Talks/Break A Tech Talk will follow each technical session. Tech Talk areas are located outside each session room. 4:00 PM–4:30 PM						
5:00 PM	PT Building Your First Rich Internet Applications with ArcGIS API for Flex Offering 1 of 2 4:30 PM–5:45 PM	PT Using the ArcGIS Server REST API 4:30 PM–5:45 PM	PT Extending the ArcGIS Desktop Applications 4:30 PM–5:45 PM	PT Implementing Security for ArcGIS Server—Java Solutions 4:30 PM–5:45 PM	APP Custom Raster Format Support in ArcGIS through GDAL 4:30 PM–5:45 PM	PT Best Practices for Designing Effective Map Services Offering 1 of 2 4:30 PM–5:45 PM	APP ArcGIS Server Performance and Scalability— Performance Factors and Optimization Offering 1 of 2 4:30 PM–5:45 PM
6:00 PM	Microsoft Sponsor Spotlight 6:00 PM–7:00 PM	IBM Sponsor Spotlight 6:00 PM–7:00 PM	Adobe Sponsor Spotlight 6:00 PM–7:00 PM				

Track Codes: **APP** Applications **MIG** Migration **PT** Products and Technology

Wednesday, March 25 | Sessions Matrix

Oasis 1 PSCC					
8:00 AM	Keynote Session (Oasis 4, PSCC) 8:30 AM–10:00 AM				
10:00 AM	ESRI Showcase 10:00 AM–4:30 PM	Spatial Outlet 10:00 AM–5:00 PM	Demo Theater Using Application Configurations to Roll Out a Customized ArcGIS Explorer 900 Experience 10:00 AM–11:00 AM	User Presentation Using OpenLayers with ArcGIS Server REST API 10:00 AM–10:45 AM	Meet the Teams Geodatabase/Editing 10:30 AM–11:00 AM
11:00 AM			Demo Theater Extending, Customizing, and Implementing the Situational Awareness Bundle 11:00 PM–NOON	User Presentation Building ArcGIS Mobile Applications with the WPF Composite Application Library 11:00 AM–11:45 AM	Meet the Teams Network and Logistics 11:00 AM–11:30 AM Meet the Teams ArcGIS Engine Controls 11:30 AM–NOON
NOON			Demo Theater Geometric Networks for Developers NOON–1:00 PM	User Presentation Harnessing Server Object Extensions NOON–12:45 PM	Meet the Teams ArcGIS Online NOON–12:30 PM Meet the Teams ArcGIS Mobile 12:30 PM–1:00 PM
1:00 PM			Demo Theater Performing Network Analysis with Geoprocessing 1:00 PM–2:00 PM	User Presentation Print & Legend Web Services for the ArcGIS JS API or Web ADF 1:00 PM–1:45 PM	
2:00 PM			Demo Theater Developing Applications for ArcGIS for AutoCAD 2:00 PM–3:00 PM	User Presentation Flex, REST, WMS and Distributed Processing for Economic Development 2:00 PM–2:45 PM	
3:00 PM			Demo Theater Integrating Microsoft Silverlight with the Web ADF 3:00 PM–4:00 PM	User Presentation Implementing a Custom Image Server Raster Format 3:00 PM–3:45 PM	Meet the Teams CAD 3:00 PM–3:30 PM
4:00 PM			Demo Theater Leveraging Dynamic Display in ArcGIS Engine Applications 4:00 PM–5:00 PM	User Presentation Intro to Agile Software Development 4:00 PM–4:45 PM	Meet the Teams Raster 4:00 PM–4:30 PM
5:00 PM					
6:00 PM	Meet the Teams (Oasis 2 and 3, PSCC) Java (ArcGIS Server and ArcGIS Engine) • ArcGIS Server JavaScript and Flex • ArcGIS Server .NET ADF and Silverlight 6:00 PM–7:00 PM (during the DevSummit Party)				

	Primrose A PSCC	Primrose B PSCC	Primrose C/D PSCC	Mesquite C PSCC	Smoketree A–E PSCC	Catalina/ Madera Wyndham Hotel	Pasadena/ Sierra/Ventura Wyndham Hotel
8:00 AM	Keynote Session (Oasis 4, PSCC) 8:30 AM–10:00 AM						
10:00 AM							
11:00 AM	PT Developing Advanced Applications with the ArcGIS JavaScript API <i>Offering 1 of 2</i> 10:30 AM–11:45 AM	PT Developing Advanced Applications with the ArcGIS API for Flex <i>Offering 1 of 2</i> 10:30 AM–11:45 AM	PT Working with ArcGIS Server Services Using the SOAP API 10:30 AM–11:45 AM	APP Customizing Editing Workflows with the Java Web ADF 10:30 AM–11:45 AM	PT Python Scripting—Advanced Techniques 10:30 AM–11:45 AM	PT Customization with the ArcGIS Server Image Extension <i>Offering 1 of 2</i> 10:30 AM–11:45 AM	APP ArcGIS Server Performance and Scalability—Testing Methodologies <i>Offering 1 of 2</i> 10:30 AM–11:45 AM
NOON	Lone GIS Professional Special Interest Group Meeting NOON–1:00 PM	Hosted Lunch (Oasis 2 and East Lawn, PSCC) NOON–1:00 PM					
1:00 PM	APP Patterns and Best Practices for Building Applications with ArcGIS API for Flex <i>Offering 1 of 2</i> 1:00 PM–2:15 PM	PT Introduction to the ArcGIS API for Microsoft Silverlight 1:00 PM–2:15 PM	PT Extending ArcGIS with Java 1:00 PM–2:15 PM	PT Programming and Design Patterns for ArcPad 1:00 PM–2:15 PM	PT Developing with ArcGIS Raster APIs 1:00 PM–2:15 PM	PT Implementing Security for ArcGIS Server .NET Solutions 1:00 PM–2:15 PM	APP Building and Optimizing Geoprocessing Services for ArcGIS Server <i>Offering 1 of 2</i> 1:00 PM–2:15 PM
2:00 PM	Tech Talks/Break A Tech Talk will follow each technical session. Tech Talk areas are located outside each session room. 2:15 PM–2:45 PM						
3:00 PM	APP Top 10 How-tos for the ArcGIS Server .NET ADF 2:45 PM–4:00 PM	PT Developing Advanced Applications with the ArcGIS API for Flex <i>Offering 2 of 2</i> 2:45 PM–4:00 PM	PT Extending ArcGIS Server with Java 2:45 PM–4:00 PM	APP Creating a 3D Virtual City Using ArcGIS 2:45 PM–4:00 PM	APP Distributed Geodatabase Development 2:45 PM–4:00 PM	PT Introducing and Implementing ArcGIS Explorer 900—Part I 2:45 PM–4:00 PM	PT Advanced Map Caching Topics <i>Offering 1 of 2</i> 2:45 PM–4:00 PM
4:00 PM	Tech Talks/Break A Tech Talk will follow each technical session. Tech Talk areas are located outside each session room. 4:00 PM–4:30 PM						
5:00 PM	APP Patterns and Best Practices for Building Applications with ArcGIS API for JavaScript <i>Offering 1 of 2</i> 4:30 PM–5:45 PM	PT Best Practices for Designing Effective Map Services <i>Offering 2 of 2</i> 4:30 PM–5:45 PM	APP Building Custom Tasks for ArcGIS Server .NET Web Applications 4:30 PM–5:45 PM	APP Customizing Graphics and MapTips with the Java Web ADF <i>Offering 2 of 2</i> 4:30 PM–5:45 PM	APP Implementing Enterprise Applications with the Geodatabase 4:30 PM–5:45 PM	PT Introducing and Implementing ArcGIS Explorer 900—Part II 4:30 PM–5:45 PM	PT Building Your First Rich Internet Applications with ArcGIS API for Flex <i>Offering 2 of 2</i> 4:30 PM–5:45 PM
6:00 PM	DevSummit Party (Oasis 2 and 3, PSCC) 6:00 PM–9:00 PM						

Thursday, March 26 | Sessions Matrix

	Primrose A PSCC	Primrose B PSCC	Primrose C/D PSCC	Mesquite C PSCC	Smoketree A-E PSCC	Catalina/ Madera Wyndham Hotel	Pasadena/ Sierra/Ventura Wyndham Hotel
8:00 AM							
9:00 AM	APP Building Great Web Maps Using ArcGIS 8:30 AM–9:45 AM	PT Developing Advanced Applications with the ArcGIS JavaScript API <i>Offering 2 of 2</i> 8:30 AM–9:45 AM	PT Working Effectively with the Geodatabase Using SQL 8:30 AM–9:45 AM	PT Developing Defense Applications Using Military Analyst and MOLE 8:30 AM–9:45 AM	APP ESRI Product Licensing 8:30 AM–9:45 AM	PT Customizing Graphics and MapTips with the .NET Web ADF 8:30 AM–9:45 AM	APP Developing for the GeoWeb: Notes from the Field 8:30 AM–9:45 AM
10:00 AM	Tech Talks/Break A Tech Talk will follow each technical session. Tech Talk areas are located outside each session room. 9:45 AM–10:15 AM						
11:00 AM	APP ArcGIS Server Performance and Scalability— Performance Factors and Optimization <i>Offering 2 of 2</i> 10:15 AM–11:30 AM	MIG ArcGIS 9.4: The Road Ahead for Developers 10:15 AM–11:30 AM	APP Implementing ArcGIS Mobile Applications for the Enterprise 10:15 AM–11:30 AM	APP Deploying ArcGIS Desktop and ArcGIS Engine Applications in .NET 10:15 AM–11:30 AM	APP Leveraging the OGC Capabilities of ArcGIS Server 10:15 AM–11:30 AM	APP Patterns and Best Practices for Building Applications with the ArcGIS API for Microsoft Silverlight 10:15 AM–11:30 AM	PT An Overview of the ArcGIS JavaScript APIs <i>Offering 2 of 2</i> 10:15 AM–11:30 AM
NOON	Closing Session and Lunch (Oasis 4, PSCC) 11:30 AM–1:00 PM						
1:00 PM							
2:00 PM	APP Patterns and Best Practices for Building Applications with ArcGIS API for JavaScript <i>Offering 2 of 2</i> 1:30 PM–2:45 PM	APP Patterns and Best Practices for Building Applications with ArcGIS API for Flex <i>Offering 2 of 2</i> 1:30 PM–2:45 PM	APP Building and Optimizing Geoprocessing Services for ArcGIS Server <i>Offering 2 of 2</i> 1:30 PM–2:45 PM	PT Customization with the ArcGIS Server Image Extension <i>Offering 2 of 2</i> 1:30 PM–2:45 PM	APP Building ArcGIS Applications for AutoCAD 1:30 PM–2:45 PM	PT Advanced Map Caching Topics <i>Offering 2 of 2</i> 1:30 PM–2:45 PM	APP ArcGIS Server Performance and Scalability— Testing Methodologies <i>Offering 2 of 2</i> 1:30 PM–2:45 PM

Track Codes: **APP** Applications **MIG** Migration **PT** Products and Technology

A mandate for change is a mandate for smart.

The world is ready for change – that much is clear.

For leaders of all kinds, this moment presents a rare opportunity. Our planet is not just getting smaller and flatter. It is also becoming smarter. And that means we have the potential to change the way the world literally works.

Computational power is now being put into things we wouldn't recognize as computers – cars, appliances, cameras, roadways...even pharmaceuticals and livestock. We are interconnecting all of this through the Internet, which has come of age. And we are applying powerful new systems and sophisticated analytics to turn oceans of data into insight, knowledge and intelligence.

Consider the changes already under way.

Smart traffic systems are helping to reduce gridlock by 20%, cutting pollution and increasing ridership on public transit.

Smart food systems based on RFID technology embedded into supply chains are monitoring meat, poultry and other items from the farm to the supermarket shelf.

Smart healthcare systems are helping to lower the cost of therapy by as much as 90%.

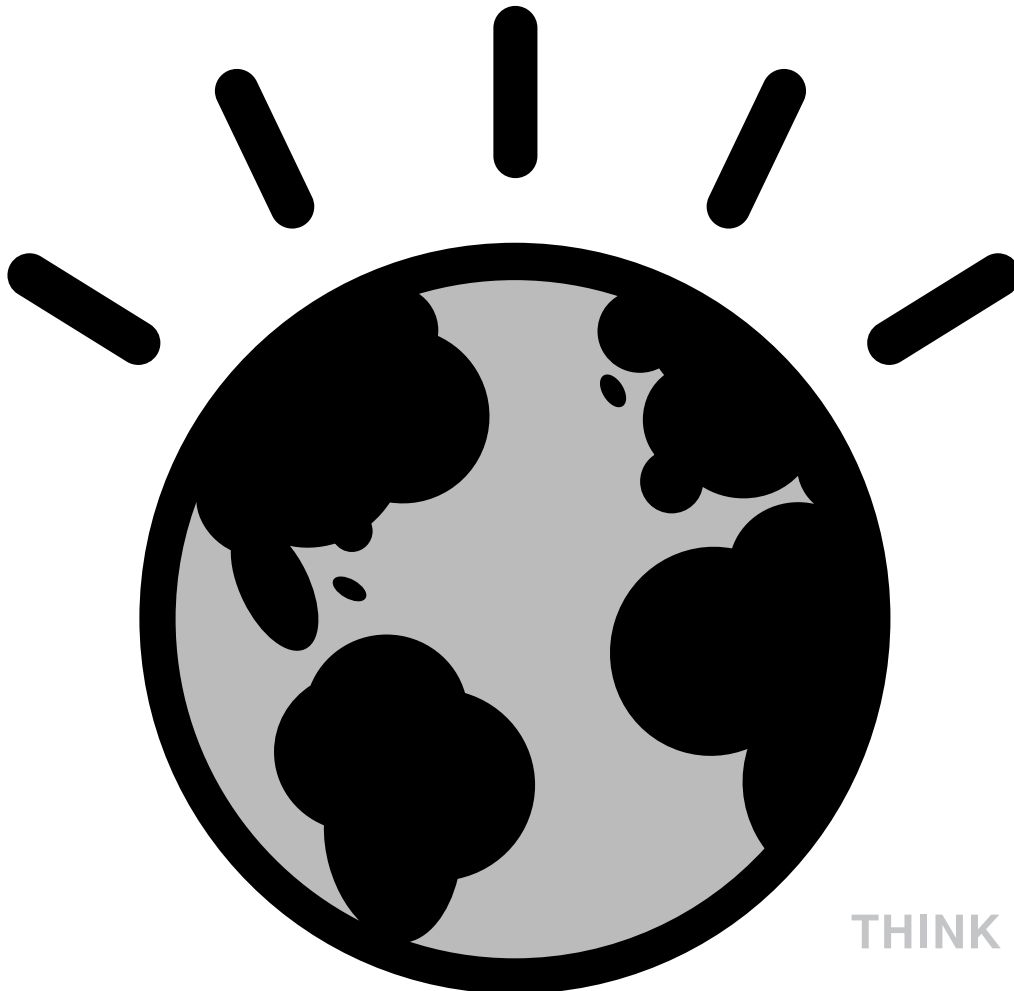
Police departments are correlating street-level information from myriad observations and devices to identify crime patterns – helping prevent crime, rather than simply punishing it.

The list is long, and the transformation is just beginning. Its benefits will be reaped not only by large enterprises, but also by mid-sized and small companies – the engines of economic growth everywhere – and by individuals and communities around the world.

Imagine how a smarter planet will transform *all* the things we seek. The ways we pursue economic growth, societal progress, environmental sustainability and cures for disease. The way we interact with each other and with the world.

The opportunity is before us, and the moment will not last forever. Will we seize it? As we look to stimulate our economies and rebuild our infrastructure, will we simply repair what's broken? Or will we prepare for a smarter future?

Join us at ibm.com/government



THINK



Monday, March 23 | Presummit Seminar Descriptions

8:30 AM–11:30 AM

Introduction to ESRI's Developer Technologies

8:30 AM–11:30 AM • Catalina/Madera, Wyndham Hotel

Presenter(s): Allan Laframboise, Andy Gup, Jim Barry, Kevin Deege

ArcGIS is ESRI's complete system for authoring, serving, and using geographic information. This session will introduce the ArcGIS suite of developer technologies and illustrate the role of ArcGIS in a GIS implementation from a client, server, and database perspective. Gain insight into the software development toolkits and APIs, including .NET, Java, JavaScript, and Flex, as well as other ESRI resources. This knowledge will help developers get started building desktop applications, multiuser Web applications, and geodatabase and geoprocessing applications. This is a foundation session that provides context for other sessions in the presummit seminars and in the summit.

Prerequisites: None

Introduction to ArcGIS Explorer 900

8:30 AM–11:30 AM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): Andy MacDonald and Jeff Jackson

ArcGIS Explorer marks a significant new release featuring a completely new user interface, a variety of new customization and deployment options, and a new software developer kit (SDK). This session will introduce the product, the overall capabilities of ArcGIS Explorer, and how it fits into the family of ArcGIS and online products. It will also provide an overview of how developers can customize the product with add-ons and application configurations and by using the .NET-based SDK. Please note that these features will be discussed in more detail in the technical sessions.

Prerequisites: None

1:00 PM–4:00 PM

Developer's Guide to the Geodatabase

1:00 PM–4:00 PM • Catalina/Madera, Wyndham Hotel

Presenter(s): Colin Zwicker, Craig Gillgrass, James MacKay, Jessica Parteno

This seminar will describe the geodatabase and its role in providing data access to the ArcGIS system. Key concepts and an overview of the geodatabase architecture will be presented. Attendees will learn the key elements of the geodatabase API; how it can be used to access a variety of formats; and best practices and patterns for accessing data, querying, editing, and data loading.

Prerequisites: Basic understanding of geodatabase terms and concepts; code examples shown in C#

Designing and Developing Geoprocessing Tools with ArcGIS

1:00 PM–4:00 PM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): Bill Moreland, Dale Honeycutt

This session is for developers who are interested in leveraging the geoprocessing framework and associated Python and ArcObjects Software Developer Kit (SDK) to build well-designed tools. It will look at how the new geoprocessing features in ArcGIS 9.3 can be used to simplify tool development. Demonstrations, including code examples using Python and .NET, will be used to illustrate the development techniques and best practices that should be implemented in this framework. The major topics will include how to set script tool parameters and their properties as well as how to provide custom behavior for tools when used with ArcGIS Desktop. Custom behavior includes the enabling and disabling of parameters, providing default parameter values, updating parameter value descriptions of output data, allowing tools to work seamlessly in ModelBuilder, and improving an organization's overall efficiency when working with ArcGIS.

Prerequisites: Geoprocessing tools, Python, .NET



Monday, March 23 | Demo Theater Descriptions

Extending ArcLogistics

4:00 PM–5:00 PM • Oasis 1, PSCC

Presenter(s): *Jeff Wickstrom*

This session will review methods and best practices for extending ArcLogistics. Topics covered will include developing an ArcLogistics extension and international localization. The session will cover typical use cases, how to use the developer resources, and best practices illustrated through diagrams and sample code.

Creating Custom Clients for the ArcGIS Server Image Extension

5:00 PM–6:00 PM • Oasis 1, PSCC

Presenter(s): *Ringu Nalankal, Smrithi Chandran*

A direct client connection can be made to the ArcGIS Server Image extension using the Image Server Client DLL (ISClient.dll). This compact DLL can easily be integrated into a number of different applications or you can create your own client application, allowing direct access to the imagery and features of the image service. The client access uses the remote procedure call (RPC) protocol. This session will walk developers through the steps needed to create a client application and provide a thorough understanding of the source code for the Image Server Viewer.

ArcGIS Business Analyst Server

6:00 PM–7:00 PM • Oasis 1, PSCC

Presenter(s): *Bob Hazelton III, Tony Howser*

ArcGIS Business Analyst Server is ESRI's platform for spatially enabling a commercial enterprise. Learn how you can use Business Analyst Server to quickly develop rich Internet applications that enable businesses to distribute location-related decision making across their organization. Through demonstrations of the Business Analyst Server REST and SOAP APIs and its vast demographic, consumer spending, and market segmentation datasets, you will learn how Business Analyst Server can be used to build Web 2.0 solutions for site selection, target marketing, risk analysis, and more.



Tuesday, March 24 | Developer Summit Plenary Session

8:30 AM–11:45 AM • Oasis 4, PSCC



- 8:30 AM–9:45 PM** **Part I**
- Summit Overview
 - Software Update from Development Staff
 - GIS for the Web
 - Best Practices and Patterns for Success with ArcGIS 9.3.1
 - ArcGIS Online—Search and Share

9:45 AM–10:15 AM **Break**

- 10:15 AM–11:45 AM** **Part II**
- Online Communities and Developer Resources
 - ArcGIS and the Java Developer
 - Microsoft .NET APIs for ArcGIS

11:45 AM–1:00 PM **Hosted Lunch**
(Oasis 2 and Primrose Esplanade, PSCC)



Tuesday, March 24 | Session Descriptions

Track Codes

APP	Applications
MIG	Migration
PT	Products and Technology

1:00 PM–2:15 PM

Migrating VBA/VB6 ArcObjects Applications to .NET (MIG)

1:00 PM–2:15 PM • Primrose A, PSCC

Presenter(s): Don Kemlage, Jeremy Wright, Jianxia Song

ArcGIS Desktop and ArcGIS Engine developers can leverage the features and capabilities of the .NET SDK to build rich desktop applications. This session will illustrate how to move Visual Basic for Applications (VBA) and VB6 code and applications to the latest version of Visual Studio and the .NET Framework. Developers will be introduced to a number of tools, design practices, tips and tricks, and self-help resources that are essential to making this transition possible. The session will include a discussion on the differences in language-specific constructs; error handling; data types; accessing the base application; IDE usage; component registration; and the development of common components such as commands, tools, menus, and toolbars.

Prerequisites: ArcObjects, VBA, VB6, .NET

A Developer's Guide to ArcGIS Server (PT)

1:00 PM–2:15 PM • Primrose B, PSCC

Presenter(s): Ismael Chivite

This session will discuss the different choices available for building Web applications on top of ArcGIS Server. This includes the Web ADFs (.NET and Java) and the lightweight APIs (Flex and JavaScript). The presenters will describe what these different options do and why developers should pick one or the other. Strategies for extending ArcGIS Server with additional functionality will be described as well.

Prerequisites: None

Programming and Design Patterns for the ArcGIS Mobile API (PT)

1:00 PM–2:15 PM • Primrose C/D, PSCC

Presenter(s): Jay Chen, Sabine Barrera

The ArcGIS Mobile SDK allows developers to build and deploy centrally managed, fully customized mobile applications. This session will cover key features of the ArcGIS Mobile SDK and describe in detail what developers need to know to write effective mobile applications for ArcGIS Server. Coding and design techniques will illustrate how to leverage the power of the .NET and .NET Compact Framework to build mobile solutions with new features of the SDK and Windows Mobile. Also included

will be a discussion of other advanced development patterns and best practices such as multithreading and effective ways of managing mobile map caches.

Prerequisites: .NET Compact Framework

Support Operations and Processes Presentation (APP)

1:00 PM–2:15 PM • Mesquite C, PSCC

Presenter(s): Aaron Zureick, Chris Fox

ESRI Support Services understands that the aspects of technical support our developers value most are often different from issues regarding general usage of the products. This interactive session will use a survey to build discussion regarding the aspects of support services that the developer finds most important. The session will also focus on the details of recent changes and initiatives that will enhance the experience of developers contacting ESRI Support Services.

Prerequisites: None

Developing Java Applications with ArcGIS Engine (PT)

1:00 PM–2:15 PM • Smoketree A–E, PSCC

Presenter(s): Eric Bader, Steven Rozic

ArcGIS Engine offers a complete solution for building GIS applications with Java. The product contains a rich set of software components and an accompanying software developer kit (SDK) that Java developers can use to build many different specialized desktop or embedded applications. The ArcGIS Engine SDK for Java includes a number of tutorials for getting started, migration documents, and how-to help topics as well as a set of integrated Eclipse tools that enable developers to be more productive with everyday programming tasks. This session will introduce ArcGIS Engine programming techniques to Java developers and illustrate some real-world application case studies including multithreaded ArcGIS Engine applications, applying best practices for Swing and ArcObjects programming, and dynamic display of geographic data.

Prerequisites: ArcObjects, Java

1:00 PM–2:15 PM *(continued)*

Developing .NET Applications for ArcGIS Engine (PT)

1:00 PM–2:15 PM • Catalina/Madera, Wyndham Hotel

Presenter(s): *Kylie Donia*

ArcGIS Engine offers a complete solution for building GIS applications with .NET. The product contains a rich set of software components and an accompanying software developer kit (SDK) that .NET developers can use to build many different specialized applications. The ArcGIS Engine SDK for .NET includes a number of tutorials for getting started, migration documents, and how-to help topics as well as a set of integrated Visual Studio .NET tools that enable developers to be more productive with everyday programming tasks. This session will introduce ArcGIS Engine to .NET developers and illustrate how the software can be used to build a number of real-world applications out of the box with very little programming.

Prerequisites: ArcObjects, .NET

Effective Geodatabase Programming (PT)

1:00 PM–2:15 PM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): *Brent Pierce, Erik Hoel*

ArcGIS developers build applications that can access and interact with a geodatabase. This session will cover key ArcObjects programming techniques and APIs that must be employed when developing high-performance geodatabase applications. This session will focus on issues that will allow developers to be more efficient, write less code, and save time. Topics will include the correct and efficient use of the cursor model, how and when to implement feature class extensions, and how to work with the new extension datasets (network datasets, terrains, cadastral fabrics, and representation classes). Code examples will be shown in C#, Java, and C++.

Prerequisites: Geodatabase programming, information models, .NET

2:45 PM–4:00 PM

Moving Desktop Applications to ArcGIS Server (MIG)

2:45 PM–4:00 PM • Primrose A, PSCC

Presenter(s): *Alagiri Venkatachalapathy, Kelly Hutchins*

ArcGIS Server allows developers to build powerful applications that can be shared across the enterprise. This session will illustrate the key differences between the ArcGIS Desktop and ArcGIS Server developer components and framework as well as show design patterns for moving applications from one technology to the other. Learn how to write portable ArcObjects code and take advantage of the features available in the ArcGIS Server Web ADF.

Prerequisites: ArcObjects, .NET

An Overview of the ArcGIS JavaScript APIs (PT)

2:45 PM–4:00 PM • Primrose B, PSCC

Presenter(s): *Jayant Sai, Jeremy Bartley*

ArcGIS Server 9.3 introduced the ArcGIS for API JavaScript and ArcGIS JavaScript extensions for Google Maps and Virtual Earth that are powered by a REST API. This session's attendees will learn about these APIs and explore the online SDKs. The main focus will be to show developers how to build applications with each of the JavaScript APIs by walking participants through the online samples in the SDK and covering best practices.

Prerequisites: ArcGIS Server, JavaScript, HTML

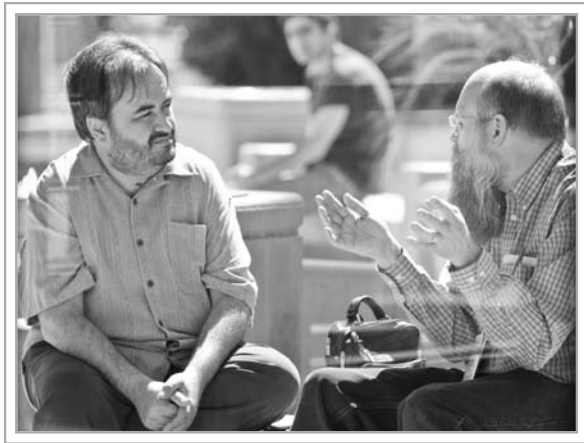
Enhancing Your Applications with ArcGIS Online (PT)

2:45 PM–4:00 PM • Primrose CID, PSCC

Presenter(s): *Deane Kensok*

ArcGIS Online offers a family of Web-based content and services that enhance and extend the ArcGIS user experience. ArcGIS Online services support functions such as mapping, geocoding, routing, and reporting. In this session, developers will learn how to access and utilize ArcGIS Online services to enhance their applications. ArcGIS Online offers click-to-add content services as well as source data retrieval to enrich ArcGIS applications. It also provides task services, such as geocoding and routing, which users can execute directly from ArcGIS applications or from custom Web applications. This session will describe and demonstrate what services are currently available and how they can be used in your ArcGIS software-based applications.

Prerequisites: None



Building and Extending Tasks for ArcGIS Server—Java Web Applications (PT)

2:45 PM–4:00 PM • Smoketree A–E, PSCC

Presenter(s): David Cardella, James Gough

ArcGIS Server includes a Web Application Development Framework (ADF) for the Java platform that enables integration of GIS functionality into Web applications. This session will introduce and discuss different parts of the Web ADF, which includes GIS Web controls, an ADF JavaScript library, support for multiple data sources, and a task framework for packaging and integrating custom logic within the ADF architecture. Through code samples, best practices, and tips and tricks, attendees will learn how to customize the out-of-the-box tasks provided with the ADF, explore core task framework concepts, and leverage the ADF to build and deploy custom tasks.

Prerequisites: Java

Building .NET Applications Using the ArcGIS Server Web ADF (PT)

2:45 PM–4:00 PM • Catalina/Madera, Wyndham Hotel

Presenter(s): Rex Hansen, Richard Zwaap

ArcGIS Server includes a Web Application Development Framework (ADF) for the Microsoft .NET framework that enables integration of GIS functionality into Web applications. This session will introduce and discuss different parts of the Web ADF, which includes GIS Web controls, an ADF JavaScript library, support for multiple data sources, rich client graphics APIs, and a task framework for packaging and integrating custom logic within the ADF architecture. Patterns for utilizing the Microsoft ASP.NET AJAX framework, on which the ADF is based, will also be presented.

Prerequisites: Proficiency in ASP.NET development techniques and a basic understanding of ArcGIS

Building Geoprocessing Tools with Python (PT)

2:45 PM–4:00 PM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): Bill Moreland, Dale Honeycutt

This session is intended for developers who are interested in leveraging the geoprocessing tools and framework and existing Python SDK to build geoprocessing tools. The session will look at how the new Python improvements in ArcGIS 9.3 can be used to simplify tool development and build a well-designed tool. The major topics covered will include the advantages of script tools, how to create script tools in ArcGIS Desktop using the script tool wizard, running tools in process versus out of process, how to use the ToolValidator Python class for updating the description of output data, allowing tools to work seamlessly in ModelBuilder and improve an organization's overall efficiency, and how to document and correctly package tools for sharing. We recommend attending this session before the Python Scripting—Advanced Techniques session.

Prerequisites: Introduction to Python, geoprocessing

4:30 PM–5:45 PM

Building Your First Rich Internet Applications with ArcGIS API for Flex (PT)

4:30 PM–5:45 PM • Primrose A, PSCC

Presenter(s): Antony Jayaprakash, Bjorn Svensson

At ArcGIS 9.3, the new ArcGIS API for Flex enables developers to write visually rich and engaging ArcGIS Server applications that run inside the Adobe Flash player. Attendees will learn how to build their first Flex-based ArcGIS Server Web application. The presenters will provide an introduction to the API, discuss topics on how to get started, and share ways to get more help from the Flex community. No prior knowledge of the Adobe Flex framework is required.

Prerequisites: ArcGIS Server and basic Web programming skills

Using the ArcGIS Server REST API (PT)

4:30 PM–5:45 PM • Primrose B, PSCC

Presenter(s): Jeremy Bartley, Keyur Shah

ArcGIS Server 9.3 introduces a powerful REST API. The API's capabilities allow users to create maps, execute queries, geocode, perform geometry operations, access tiles, and generate KML. Attendees will learn how to use the REST API from a variety of mashup environments including JavaScript, HTML, Google Earth, Python, and other Web technologies.

Prerequisites: JavaScript, Web development

Tuesday, March 24 | Session Descriptions

4:30 PM–5:45 PM *(continued)*

Extending the ArcGIS Desktop Applications (PT)

4:30 PM–5:45 PM • Primrose CID, PSCC

Presenter(s): Katy Dalton, Kevin Deege

The ArcGIS Desktop applications, including ArcMap, ArcCatalog, and ArcGlobe, all share a common application framework. Developers can extend these applications with custom buttons, tools, windows, and extensions to provide additional functionality to end users. This session will provide a number of tips and tricks that show how to more effectively customize and extend ArcGIS applications by building custom COM components with .NET.

Prerequisites: .NET

Implementing Security for ArcGIS Server—Java Solutions (PT)

4:30 PM–5:45 PM • Mesquite C, PSCC

Presenter(s): Jay Theodore, Shreyas Shinde

ArcGIS Server 9.3 allows users to secure their applications and services in an easy, interoperable way. Secure services and applications through either traditional Java application servers or new token-based security, then access a variety of user stores such as LDAP, custom databases, and Active Directory. This session will begin with a brief introduction to the new security model along with its user interface. It will then dive into specific workflows such as setting up SSL, working with multiple user/role stores with a single instance of ArcGIS Server, and writing custom user/role store providers. This session will also provide some best practices and tips for setting up security.

Prerequisites: Java, Web development, administration

Custom Raster Format Support in ArcGIS through GDAL (APP)

4:30 PM–5:45 PM • Smoketree A–E, PSCC

Presenter(s): Frank Warmerdam

ArcGIS has been using the Geospatial Data Abstract Library (GDAL) as its primary raster I/O library for reading and writing raster datasets of different formats since 9.2. ArcGIS via GDAL provides an open framework for third parties to extend raster format support. In this session, the developer is taken through all the steps necessary to implement a custom raster format in ArcGIS using C++. The session will include a discussion of the GDAL data model, how this maps to ArcGIS, and how aspects of the data model are returned from a GDAL driver.

Prerequisites: Knowledge of raster data and C++

Best Practices for Designing Effective Map Services (PT)

4:30 PM–5:45 PM • Catalina/Madera, Wyndham Hotel

Presenter(s): Sterling Quinn, Tom Brenneman

This session will explain how to prepare an existing ArcMap document for optimal performance on the Web. The presenters will demonstrate how to use the new 9.3.1 optimized map service for ArcGIS Server. They will also discuss when it is appropriate to use additional techniques for quickly publishing maps such as creating tile caches or displaying data with client-side graphics. Attending this session before the Advanced Map Caching Topics session is highly recommended.

Prerequisites: None

ArcGIS Server Performance and Scalability—Performance Factors and Optimization (APP)

4:30 PM–5:45 PM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): Andrew Sakowicz, Eric Miller, Frank Pizzi

This session will focus on analyzing key performance factors and the root cause of typical performance problems when deploying ArcGIS Server. This knowledge can be used to implement cost-effective system improvements that will lead to higher productivity and user satisfaction. Using a bottom up approach, we will identify critical components (e.g., data sources, geodatabase, geoprocessing, map documents, application, system architecture design, hardware, virtualization) and quantify how optimization of these components impacts overall performance and scalability.

Prerequisites: None



Tuesday, March 24 | Demo Theater Descriptions

Building SharePoint Web Parts with the Web ADF

1:00 PM–2:00 PM • Oasis 1

Presenter(s): Rex Hansen, Richard Zwaap

Microsoft Office SharePoint Server 2007 provides a comprehensive platform for efficiently managing enterprise content, intelligence, and search systems. Custom interactive content provided to SharePoint users is often packaged in visual server controls termed Web Parts. In this environment, Web ADF server controls and logic can be deployed within a Web Part to expose GIS functionality within SharePoint. This demo theater will discuss and show building a Web Part that contains Web ADF controls and deploying the Web Part within SharePoint.

ArcGIS Explorer 900 Developer: A Truly Managed Experience

2:00 PM–3:00 PM • Oasis 1

Presenter(s): Larry Young

Learn about the new .NET API in ArcGIS Explorer 900, which has significantly evolved from the current 500 version. Demonstrations will show you how to customize ArcGIS Explorer as well as how to make use of the rich functionality available in the Application, Mapping, Data, and Geometry name spaces.

Developing Real-Time Applications with Tracking Analyst and Tracking Server

3:00 PM–4:00 PM • Oasis 1

Presenter(s): Hanoch Kalmanovich, Morakot Pilouk, Ryan Elliott, Shashwati Kasetty

Learn about the various ways you can develop ArcGIS software-based applications that include real-time data content. Developing applications for use with ArcGIS Desktop, ArcGIS Engine, and ArcGIS Server will be demonstrated.

Creating Custom GIS Portals Using GIS Portal Toolkit

4:00 PM–5:00 PM • Oasis 1

Presenter(s): Marten Hogeweg

In this demo theater presentation, users will be introduced to the concept of GIS portals and their role in spatial data infrastructures. We will describe how ESRI's GIS Portal Toolkit extension to ArcGIS Server supports discovery and access to geospatial resources for SDI and how you can tailor GIS Portal Toolkit to meet your specific needs through a number of developer samples.

Developing Custom Forms and Queries for ArcPad AXF Files

5:00 PM–6:00 PM • Oasis 1

Presenter(s): Jian Lange

ArcPad 7.1 introduced the AXF file format, which is a lightweight geodatabase based on Microsoft SQL Server Compact Edition. This session will demonstrate how to work with ArcPad AXF files through code samples and SQL queries. Developers will learn how to build custom forms for AXF files and to take the best advantage of this powerful mobile database format.



Tuesday, March 24 | User Presentations

Building RESTful Apps and Services Using MVC

1:00 PM–1:45 PM • Oasis 1, PSCC

Presenter(s): *Brian Noyle, DTSAgile*

The presentation will leverage a suite of tools in the “http goodness” toolbox to discuss the implementation of RESTful applications and services utilizing ESRI’s REST and JavaScript APIs in association with Microsoft’s ASP.NET MVC framework. Caching, linking, bookmarking, and friendly URLs are all nice features of the RESTful architecture but, as a developer, consider the impact on your next Geoweb app of having absolute control over addressable resources (data views and maps), guaranteed code quality governed by TDD principals, the opportunity for pluggable back end services in a hybrid solution, and the opening of doors for software and data interoperability over HTTP! The presenter will focus on real-world examples from recent development initiatives to illustrate the potential impact of RESTful services and applications in the geospatial enterprise. Implementation challenges for strictly RESTful URLs, architectural patterns, code examples, real-world systems demos, and other shiny bits will all be in attendance.

Philadelphia Map Plug-in: Reusable Map Control with ArcGIS API for FLEX

2:00 PM–2:45 PM • Oasis 1, PSCC

Presenter(s): *Sreejith Parthasarathy, City of Philadelphia*

Philadelphia city departments often lack the technological means of sharing spatial data online; out-of-the-box solutions lack customized functionality while ad hoc applications are costly and time-consuming to produce and often duplicate aspects of previous development efforts. Building on ESRI’s Flex Viewer, the Map Plug-in exposes a query string API that can be leveraged by the client to alter the behavior of a single enterprise installation of the application. By modifying the flashVars, a Flash application with customized functionalities and map content can be added to any Web page. The advantage of this architecture is that a single installation of this application can support multiple business needs. Also, all custom widgets can instantly be incorporated by any client that requires them. The Map Plug-in enables departments to efficiently share development efforts, ArcGIS services, and various data resources on an enterprise level.

ArcGIS, the Web, and the GPU—Advancing 3D GIS Visualization

3:00 PM–3:45 PM • Oasis 1, PSCC

Presenter(s): *Robert Holicky, Geoweb3d, Inc.*

This presentation will discuss the recent advancements in video card technology and its contribution to Web GIS 3D visualization. Rapid, accurate, and robust 3D visualizations can now be generated on demand from native GIS data. Today’s commodity graphics processing unit (GPU) technology, most notably driven by the game industry, continues to double its performance every six months. It increasingly provides the performance, throughput, and fidelity to visualize and analyze both 3D and 4D geospatial data. Integrating these modern visualization techniques with Web GIS is in its relative infancy. This discussion will focus on our integration of both ArcGIS Engine and an embedded browser engine with this GPU technology. Embedding ArcGIS provides the integration platform that ensures interoperability across projects, geodatabases, and broader enterprise solutions. The browser engine provides the inherent mechanism to mash up, discover, analyze, serve, and leverage the momentum of Web GIS. Examples of rendering and symbolizing datasets, ranging from the realistic to the thematic, will be provided.

Unit Testing 101: Building Testable Applications

4:00 PM–4:45 PM • Oasis 1, PSCC

Presenter(s): *Dave Bouman, DTSAgile*

This talk will cover the key ideas behind unit testing, the design patterns that facilitate testing, and some challenges faced by developers working with the ESRI APIs. Examples will include testing ArcGIS Server COM Utility classes as well as unit testing for ASP.NET MVC. We’ll also delve into dependency injection, mocking, and test-driven development.

Dynamically Creating and Deleting Map Services and Layers Using VB.NET and ArcGIS Server

5:00 PM–5:45 PM • Oasis 1, PSCC

Presenter(s): *Julie Kub, DOC/INTIA/ITS.E*

This talk will demonstrate a sample ArcGIS Server application (VB.NET, ASP.NET) that dynamically creates a nonpooled map service from a blank map, dynamically adds a user-selected dataset into the map service, and destroys the map service on demand. This gives the end users more flexibility with the map services and layers they want to use. Most of the code is from ArcObjects, as opposed to it all being through the Web ADF APIs.



Wednesday, March 25 | Developer Keynote Session

8:30 AM–10:00 AM • Oasis 4, PSCC



David Chappell

Principal, Chappell & Associates

David Chappell is principal of Chappell & Associates based in San Francisco, California. He has been the keynote speaker for many conferences and events on five continents, and his seminars have been attended by tens of thousands of developers, architects, and decision makers in 40 countries. David's books have been published in a dozen languages and his consulting clients have included Hewlett-Packard, IBM, Microsoft, Stanford University, and Target Corporation.

SOAP vs. REST: Complementary or Competitive?

David Chappell

Two approaches to creating Web services are in use today, and both have ardent fans. One, using SOAP and the WS-* specifications, follows in the footsteps of earlier distributed computing technologies. The other, the RESTful style, is explicitly based on the principles of the Web itself. Which is better? David Chappell searches for the answer in this keynote presentation.



Wednesday, March 25 | Session Descriptions

Track Codes

APP	Applications
MIG	Migration
PT	Products and Technology

10:30 AM–11:45 AM

Developing Advanced Applications with the ArcGIS JavaScript API (PT)

10:30 AM–11:45 AM • Primrose A, PSCC

Presenter(s): Jayant Sai, Jeremy Bartley

This session will show developers how to take an HTML and JavaScript Web application to the next level. The session will discuss techniques for building and using Dojo Dijit, examples of how to write custom layers, ways of extending the ArcGIS for API JavaScript classes, debugging techniques, options for printing from a Web application, and integration with other JavaScript libraries.

Prerequisites: ArcGIS Server, JavaScript, HTML

Developing Advanced Applications with the ArcGIS API for Flex (PT)

10:30 AM–11:45 AM • Primrose B, PSCC

Presenter(s): Bjorn Svensson, Dasa Paddock, Mansour Raad

This session's attendees will learn how to extend their ArcGIS API for Flex-based applications even further by taking advantage of the powerful Adobe Flex framework. The session will cover how to write thematic mapping applications and custom layers, change the default look and feel of components, and provide developers with ways to use Flex effects. The presenters will also discuss deployment considerations and look at other developer productivity options provided by the Flex framework.

Prerequisites: ArcGIS Server, Flex

Working with ArcGIS Server Services Using the SOAP API (PT)

10:30 AM–11:45 AM • Primrose CID, PSCC

Presenter(s): John Hauck, Rex Hansen

ArcGIS Server includes map, globe, geodata, geoprocessing, geocoding, network analysis, geometry, and image services. Session attendees will receive an overview of these foundation ArcGIS Server services and learn how they are exposed via the ArcGIS Server SOAP API. This session will include a variety of Web and desktop samples that teach how to work with these services.

Prerequisites: SOAP, Web development

Customizing Editing Workflows with the Java Web ADF (APP)

10:30 AM–11:45 AM • Mesquite C, PSCC

Presenter(s): Divesh Goyal

This session will describe the editing framework available in the Java Web ADF and how it can be used by developers to implement custom editing workflows. The presenter will discuss patterns on how to develop server-side customizations, such as business rules and validation, to augment the editing process. The session will also cover techniques on how to leverage the Java Web ADF JavaScript library to provide a customized user experience as well as how to extend the library to develop client-side editing tools and actions.

Prerequisites: ArcGIS Server Java, Java ADF

Python Scripting—Advanced Techniques (PT)

10:30 AM–11:45 AM • Smoketree A–E, PSCC

Presenter(s): David Wynne, Nathan Warmerdam

This session is intended for developers who are interested in leveraging the existing Python SDK to incorporate more advanced logic and analysis into existing scripts. The session will discuss and demonstrate the use of tools and objects, such as describe, field mapping, geometry, and cursors, to perform and improve data processing workflows.

Prerequisites: Geoprocessing, Building Geoprocessing Tools with Python session

Customization with the ArcGIS Server Image Extension (PT)

10:30 AM–11:45 AM • Catalina/Madera, Wyndham Hotel

Presenter(s): Feroz Abdul Kadar, Prashant Mangtani

The ArcGIS Server Image extension (formerly known as ArcGIS Image Server) is used to author and serve large collections of raster data as image services, thereby providing fast access to and visualization of large quantities of imagery. It can be used on its own or as the image extension to ArcGIS Server. This session will cover how to add a custom raster type or raster format and a custom process. Through code samples, developers will learn the requirements for creating a custom raster format and steps to create a custom raster type that reads a raster format and its metadata as well as georeferencing data. Plus, learn what is necessary when creating a C or C++ DLL that can be used as a process. See how to define the process, how to define the user interface, and how to add it automatically using a raster type.

Prerequisites: Raster file formats, ArcGIS Image Server, C++

ArcGIS Server Performance and Scalability— Testing Methodologies (APP)

10:30 AM–11:45 AM • Pasadena/Sierra/Ventura,
Wyndham Hotel

Presenter(s): Andrew Sakowicz, Frank Pizzi

For many projects, performance is the Achilles' heel. Performance problems expose the enterprise to business inefficiencies and, potentially, the failure of critical business components. Testing, monitoring, and tuning your environment will pay off in an application that minimizes cost, maximizes return on investment, and delivers the performance users need to meet business goals. In this session, we will demonstrate performance testing methodologies for ArcGIS Server deployments and show how testing can be used to collect performance baselines, identify bottlenecks, leverage existing resource capacity more efficiently, and verify that the system meets the required performance level of service. In this session, we will cover how to write scripts for testing various frameworks and APIs including ADF AJAX, Tasks, Rest API, SOAP API, data-driven unit tests, and desktop application testing. Finally, we will demo different performance tools including Microsoft Visual Studio 2008, Apache JMeter, HP LoadRunner, Borland SilkPerformer, and NRG AppLoader.

Prerequisites: None

NOON–1:00 PM

Lone GIS Professional Special Interest Group Meeting

NOON–1:00 PM • Primrose A, PSCC

Presenter(s): David A. Howes, Compliance Services International;
Jim Barry, ESRI

As was widely recognized at the 2008 Developer Summit, a large proportion of the ESRI customer base consists of GIS users and developers who work on their own or in small groups. The Lone GIS Professional Initiative was established to bring these professionals together to help them help each other be more successful. With a strong appreciation of their common professional situation coupled with their diverse experience in GIS and a variety of other specialties, members from various parts of the world communicate on a regular basis online and at events such as this one to make new professional connections and work more effectively.

This Special Interest Group meeting provides an opportunity for existing members to discuss the progress and direction of the initiative and for other attendees to learn about how they may benefit from and contribute to its activities.

1:00 PM–2:15 PM

Patterns and Best Practices for Building Applications with ArcGIS API for Flex (APP)

1:00 PM–2:15 PM • Primrose A, PSCC

Presenter(s): Antony Jayaprakash, Mansour Raad

GIS professionals have many different options for building Web GIS applications. The user experience and expectations are different if you are tasked with building an application for the general public versus an application for someone in your organization. This session will look at several Flex applications and walk through development scenarios to help answer questions from how to move beyond trying to build an application that tries to do everything to building something that is targeted and communicates useful geographic information to the end user. How do you represent operational layers in the browser? How do you represent layers that change frequently? And how do you successfully do thematic mapping on the client?

Prerequisites: ArcGIS Server, Flex

Introduction to the ArcGIS API for Microsoft Silverlight (PT)

1:00 PM–2:15 PM • Primrose B, PSCC

Presenter(s): Art Haddad, Rex Hansen

Microsoft Silverlight provides a cross-browser, cross-platform development environment for building and delivering rich interactive applications for the Web. The ArcGIS API for Microsoft Silverlight enables you to integrate ArcGIS Server and Microsoft Virtual Earth services and capabilities in a Silverlight application. You can create interactive and expressive Web applications leveraging ArcGIS Server and Virtual Earth resources—such as maps, locators, and geoprocessing models—and Silverlight components—such as grids, treeviews, and charts. This session will demonstrate and discuss the capabilities and features of the ArcGIS API for Microsoft Silverlight.

Prerequisites: Familiarity with Microsoft Silverlight is helpful, but not required

Extending ArcGIS with Java (PT)

1:00 PM–2:15 PM • Primrose C/D, PSCC

Presenter(s): Dan O'Neill, Eric Bader, Ranjit Iyer

Starting at 9.3.1, Java developers have new ArcGIS customization options by way of extending ArcObjects. In this session, developers will learn how to create custom geoprocessing tools and custom renderers using the Eclipse integrated development environment (IDE) wizard templates and base classes. Attendees will also learn how to deploy and consume ArcObjects extensions to ArcGIS Engine, ArcGIS Desktop, and ArcGIS Server applications.

Prerequisites: ArcObjects; Java; basic understanding of ArcGIS Desktop, ArcGIS Engine, and ArcGIS Server

Wednesday, March 25 | Session Descriptions

1:00 PM–2:15 PM *(continued)*

Programming and Design Patterns for ArcPad (PT)

1:00 PM–2:15 PM • Mesquite C, PSCC

Presenter(s): *Jian Lange*

ArcPad is an out-of-the-box, complete mobile GIS solution that provides extensive customization and development capabilities. This session will show attendees how to use ArcPad Studio (included with the ArcPad 8 release) to customize the field user's experience (toolbars, data entry forms and validation, and query forms) with little or no programming. The session will also emphasize some of the new development capabilities available in ArcPad including field data synchronization with ArcGIS Server and working with ArcPad AXF files (based on Microsoft SQL Server Compact Edition), which provide tight integration with geodatabases. In addition, through code samples and demonstrations, developers will learn how to integrate ArcPad with .NET applications, Internet technologies, and hardware devices. Approaches for debugging custom applications and preparing enterprise data for ArcPad will also be discussed.

Prerequisites: .NET, scripting, SQL

Developing with ArcGIS Raster APIs (PT)

1:00 PM–2:15 PM • Smoketree A–E, PSCC

Presenter(s): *Hong Xu, Peng Gao, Robert Berger*

ArcGIS provides rich raster C# APIs that are used to manage and serve raster data and allow developers to extend the raster capabilities of ArcGIS or to build stand-alone rastercentric applications. This session will present the key topics on using raster APIs. Through code examples and sample applications, developers will learn best practices for accessing raster data from various sources including geodatabase rasters, visualizing raster data, processing raster data by developing custom geodata transformations and pixel filters, and serving raster data in ArcGIS Server.

Prerequisites: General understanding of ArcObjects and raster data, C#

Implementing Security for ArcGIS Server .NET Solutions (PT)

1:00 PM–2:15 PM • Catalina/Madera, Wyndham Hotel

Presenter(s): *Sud Menon, Tom Brenneman*

This session will begin with an overview of the ArcGIS Server security model and the user interface for securing Web services and applications. See how to configure the user/role location, set role-based permissions, and use token-based security. Topics of interest to developers will also be discussed including using a custom location for users and roles such as the XML file, Active Directory, or custom SQL Server database; common issues encountered when implementing security and troubleshooting tips for security; implementing SSL (HTTPS) for a system; customizing Web site content based on the user login; and securing applications using the JavaScript APIs.

Prerequisites: ASP.NET, Web development

Building and Optimizing Geoprocessing Services for ArcGIS Server (APP)

1:00 PM–2:15 PM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): *Nathan Warmerdam, Scott Murray*

ArcGIS Server allows users to create geoprocessing services that leverage hundreds of out-of-the-box tools in the core product. This session will demonstrate how to convert existing workflows (models, scripts, etc.) from nongeneric tools into tools that can be published as fast and efficient services. In addition, topics such as server configuration and service properties will be discussed in the context of server performance. A case study will be used to demonstrate the methods discussed and to highlight tips and tricks for common user problems.

Prerequisites: Geoprocessing, ModelBuilder

2:45 PM–4:00 PM

Top 10 How-tos for the ArcGIS Server .NET ADF (APP)

2:45 PM–4:00 PM • Primrose A, PSCC

Presenter(s): *Jian Huang, Undral Batsukh*

The ArcGIS Server .NET Web ADF provides an extensible developer framework and a rich set of software components that can be used to build applications for the Web. Most developers want to customize and extend these components further to provide specific application functionality and behavior. Based on feedback from ESRI Support Services, this session will highlight the top 10 most frequently asked how-to questions from the developer community. The session will also provide a number of tips, tricks, and best practices that illustrate how to accomplish these tasks. Some of the common tasks include how to customize callout MapTips, create thematic maps, create and customize context menus, implement AJAX, and integrate Dojo components.

Prerequisites: ASP.NET, .NET Web ADF

Developing Advanced Applications with the ArcGIS API for Flex (PT)

2:45 PM–4:00 PM • Primrose B, PSCC

Presenter(s): *Bjorn Svensson, Dasa Paddock, Mansour Raad*

This session's attendees will learn how to extend their ArcGIS API for Flex-based applications even further by taking advantage of the powerful Adobe Flex framework. The session will cover how to write thematic mapping applications and custom layers, change the default look and feel of components, and provide developers with ways to use Flex effects. The presenters will also discuss deployment considerations and look at other developer productivity options provided by the Flex framework.

Prerequisites: ArcGIS Server, Flex

Extending ArcGIS Server with Java (PT)

2:45 PM–4:00 PM • Primrose CID, PSCC

Presenter(s): Dan O'Neill, Eric Bader, Ranjit Iyer

Starting at 9.3.1, Java developers have new ArcGIS Server customization options by way of extending ArcObjects. In this session, developers will learn how to create custom “utility” objects and server object extensions in Java using the Eclipse IDE and the ArcGIS extensibility plug-ins. This session will also cover the deployment of these components to the ArcGIS Server container as well as consuming them in a Web client.

Prerequisites: ArcObjects, Java, ArcGIS Server

Creating a 3D Virtual City Using ArcGIS (APP)

2:45 PM–4:00 PM • Mesquite C, PSCC

Presenter(s): Hardeep Bajwa, Tamrat Belayneh

With the increase in the collection of 3D cityscape data, ArcGIS users are more able than ever to create a representation of a 3D virtual city. This session will focus on the methodology and best practices for creating and sharing a 3D representation of an urban area. A number of topics will be covered including data preparation, how to utilize new improvements to the texture handling of 3D data, the dos and don'ts of successful authoring of a 3D view, and sharing 3D content on the Web. Tips and tricks for how to get the most out of data, using both the user interface and ArcObjects, will also be included in the session.

Prerequisites: ArcObjects, .NET, 3D Analyst

Distributed Geodatabase Development (APP)

2:45 PM–4:00 PM • Smoketree A–E, PSCC

Presenter(s): Gary MacDougall, Khaled Hassen

ArcGIS provides the functionality to build systems that manage and distribute data. This session will focus on the distributed geodatabase internals, its programming API (C#), and its integration with external systems. The key elements of geodatabase replication will be discussed including the replication state model and replica synchronization using delta files (i.e., XML) and the geodata server. Real-world examples will be used to discuss various workflows and best developer practices.

Prerequisites: Good knowledge of the geodatabase programming models and a basic understanding of geodatabase versioning, C#

Introducing and Implementing ArcGIS Explorer 900—Part I (PT)

2:45 PM–4:00 PM • Catalina/Madera, Wyndham Hotel

Presenter(s): Andy MacDonald, Jeff Jackson

ArcGIS Explorer marks a significant new release and a departure from previous versions, featuring a completely new user interface, a range of new customization and deployment options, and a new SDK. This session will take a top-down approach to familiarizing attendees with the new user experience of ArcGIS Explorer 900, including new presentation capabilities, and will detail the various options for extending and customizing ArcGIS Explorer. We recommend taking this session or the presummit seminar before attending part II of the series.

Prerequisites: Some .NET programming experience beneficial

Advanced Map Caching Topics (PT)

2:45 PM–4:00 PM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): Sterling Quinn, Tom Brenneman

This session will focus on best practices for large caching jobs. The presenters will discuss choosing appropriate cache scale levels and image formats. They will also present advanced strategies for caching based on feature class boundaries, updating caches on a regular basis, and creating tiles on demand. Attending the Best Practices for Designing Effective Map Services session before attending this session is highly recommended.

Prerequisites: AutoCAD

4:30 PM–5:45 PM

Patterns and Best Practices for Building Applications with ArcGIS API for JavaScript (APP)

4:30 PM–5:45 PM • Primrose A, PSCC

Presenter(s): Jeremy Bartley

GIS professionals have many different options for building Web GIS applications. The user experience and expectations are different if you are tasked with building an application for the general public versus an application for someone in your organization. This session will look at several JavaScript applications and walk through development scenarios to help answer questions from how to move beyond trying to build an application that tries to do everything to building something that is targeted and communicates useful geographic information to the end user. How do you represent operational layers in the browser? How do you represent layers that change frequently? And how do you successfully do thematic mapping on the client?

Prerequisites: ArcGIS Server, JavaScript

4:30 PM–5:45 PM *(continued)*

Best Practices for Designing Effective Map Services (PT)

4:30 PM–5:45 PM • *Primrose B, PSCC*

Presenter(s): Sterling Quinn, Tom Brenneman

This session will explain how to prepare an existing ArcMap document for optimal performance on the Web. The presenters will demonstrate how to use the new 9.3.1 optimized map service for ArcGIS Server. They will also discuss when it is appropriate to use additional techniques for quickly publishing maps such as creating tile caches or displaying data with client-side graphics. Attending this session before the Advanced Map Caching Topics session is highly recommended.

Prerequisites: None

Building Custom Tasks for ArcGIS Server .NET Web Applications (APP)

4:30 PM–5:45 PM • *Primrose CID, PSCC*

Presenter(s): Nikhil Shampur, Senthia Sivabalan

The .NET Web ADF delivers out-of-the-box tasks that are built on a common task framework. This session will introduce the task framework architecture and its capabilities, discuss custom task development options, and demonstrate how to build custom tasks. A series of best practices and use cases, coupled with code samples, will provide attendees with real-world solutions for building and deploying custom tasks.

Prerequisites: ASP.NET, AJAX

Customizing Graphics and MapTips with the Java Web ADF (APP)

4:30 PM–5:45 PM • *Mesquite C, PSCC*

Presenter(s): Dan O'Neill, David Cardella

The Java Web ADF includes multiple resources available to developers including the Graphics Resource. The Graphics Resource allows adding feature data to an existing map and is ideal for displaying data as a result of an operation or task. This session will introduce the Graphics Resource and how it can be used with features like MapTips and Query Results. Ways to add features to the Graphics Resource and customize the results displayed in callout windows and the results panel will be explored.

Prerequisites: ArcGIS Server—Java, Java ADF

Implementing Enterprise Applications with the Geodatabase (APP)

4:30 PM–5:45 PM • *Smoketree A–E, PSCC*

Presenter(s): Brent Pierce, Tom Brown

Developers can build enterprise applications to interact with a geodatabase. The focus of this session will be on demonstrating how to leverage key elements of the geodatabase API (C#) to develop highly scalable multiuser enterprise applications. Topics of this session will include real-world examples of implementing versioning, archiving, database transactions, and editing and querying data. Measuring performance via code instrumentation and tracing database execution statements will also be discussed throughout the session.

Prerequisites: Geodatabase concepts, C#

Introducing and Implementing ArcGIS Explorer 900—Part II (PT)

4:30 PM–5:45 PM • *Catalina/Madera, Wyndham Hotel*

Presenter(s): Andy MacDonald, Jeff Jackson

This session is an extension of Introducing and Implementing ArcGIS Explorer 900—Part I. This session will go into more detail about the various development options for extending and customizing ArcGIS Explorer using add-ons, application configurations, and the .NET-based SDK. Other topics covered will include best practices for building and deploying ArcGIS Explorer throughout an organization, its relationship with ArcGIS Online, and its role in sharing and discovery via the new layer packages and ArcGIS Online.

Prerequisites: Presummit seminar or part I of this series, .NET programming

Building Your First Rich Internet Applications with ArcGIS API for Flex (PT)

4:30 PM–5:45 PM • *Pasadena/Sierra/Ventura, Wyndham Hotel*

Presenter(s): Antony Jayaprakash, Bjorn Svensson

At ArcGIS 9.3, the new ArcGIS API for Flex enables developers to write visually rich and engaging ArcGIS Server applications that run inside the Adobe Flash player. Attendees will learn how to build their first Flex-based ArcGIS Server Web application. The presenters will provide an introduction to the API, discuss topics on how to get started, and share ways to get more help from the Flex community. No prior knowledge of the Adobe Flex framework is required.

Prerequisites: ArcGIS Server and basic Web programming skills

Wednesday, March 25 | Demo Theater Descriptions

Using Application Configurations to Roll Out a Customized ArcGIS Explorer 900 Experience

10:00 AM–11:00 AM • Oasis 1, PSCC

Presenter(s): Dara Hughes, Larry Young

Learn how to create and deploy ArcGIS Explorer application configurations to control and simplify your customer workflow. These configurations contain a bundle of maps, data references, user interface changes, and any additional custom plug-ins.

Extending, Customizing, and Implementing the Situational Awareness Bundle

11:00 AM–NOON • Oasis 1, PSCC

Presenter(s): Albert Pascual

In this demo, we will explore the fundamental steps for developing, extending, and customizing the Flex map viewer for the ArcGIS for Situational Awareness bundle. Topics will include architecture fundamentals in GIS and the Flex map viewer and integration with ArcGIS Server. We'll present a new way to fuse information using the Flex map viewer to make better geographic reports and talk about using Flex and ArcGIS Server 9.3 to create a customized Flex map viewer that consumes data and online resources to analyze information on maps.

Geometric Networks for Developers

NOON–1:00 PM • Oasis 1, PSCC

Presenter(s): Alan Hatakeyama, Craig Gillgrass

Geometric networks offer a way to model common networks and infrastructures found in the real world such as water distribution and electrical lines. We'll discuss how to work with geometric networks at the API level—covering how to create networks, the creation and use of connectivity rules, how to create and edit network features, and how to trace against the geometric network.

Performing Network Analysis with Geoprocessing

1:00 PM–2:00 PM • Oasis 1, PSCC

Presenter(s): Deelesh Mandloi

This session will show some examples of how complex network analysis workflows can be easily achieved using the geoprocessing framework.

We will cover topics about authoring geoprocessing models for network analysis and integrating external network analysis solvers using Python to extend the Network Analyst capabilities.

Prerequisites: Python, Network Analyst

Developing Applications for ArcGIS for AutoCAD

2:00 PM–3:00 PM • Oasis 1, PSCC

Presenter(s): Alex LeReaux, Don Kuehne

This presentation will introduce the new concepts of ArcGIS for AutoCAD build 200 including the mapping specification for drawings and various coding samples to help you jump-start your own AutoCAD and ArcGIS interoperability development efforts.

Integrating Microsoft Silverlight with the Web ADF

3:00 PM–4:00 PM • Oasis 1, PSCC

Presenter(s): Rex Hansen, Richard Zwaap

Microsoft Silverlight enables designers and developers to deliver media experiences and rich interactive applications for the Web. Silverlight offers a flexible and consistent programming model that supports AJAX and .NET managed code and integrates with existing Web applications. Web ADF developers can take advantage of Silverlight features to enhance user interactivity with the Web ADF. This demo theater will discuss and demonstrate techniques for integrating Microsoft Silverlight controls with Web ADF components and functionality.

Leveraging Dynamic Display in ArcGIS Engine Applications

4:00 PM–5:00 PM • Oasis 1, PSCC

Presenter(s): Ralf Gottschalk, Yaron Fine

This session will present best practices and examples for using dynamic display with ArcGIS Engine.



Wednesday, March 25 | User Presentations

Using OpenLayers with ArcGIS Server REST API

10:00 AM –10:45 AM • Oasis 1, PSCC

Presenter(s): James Fee, RSP Architects

The ArcGIS REST API opens up ArcGIS Server to new libraries not available to users before. OpenLayers is a pure JavaScript library for displaying map data in most modern Web browsers, with no server-side dependencies. OpenLayers implements a JavaScript API for building rich Web-based geographic applications, similar to the Google Maps and MSN Virtual Earth APIs but with one important difference—OpenLayers is free software developed for and by the Open Source software community. Learn how easy it is to use OpenLayers with the ArcGIS REST API, request ArcGIS Server map services, query layers, and display them using proprietary and open source components in harmony. We'll walk through the process to create an OpenLayers Web application from scratch with the ArcGIS REST API.

Building ArcGIS Mobile Applications with the WPF Composite Application Library

11:00 AM –11:45 AM • Oasis 1, PSCC

Presenter(s): Bill Bott, Telvent Miner & Miner

The Microsoft Composite Application Library (CAL) is a freely available framework for building Windows Presentation Foundation (WPF) applications. This presentation will cover the primary components of CAL and how they can be easily combined with the ArcGIS Mobile ADF to create an extensible and modern application.

Harnessing Server Object Extensions

12:00 PM –12:45 PM • Oasis 1, PSCC

Presenter(s): Vish Uma, Timmons Group

Building Web-based enterprise GIS software presents some unique challenges and has added a twist to traditional GIS solutions. Based on its complexity and requirements, different techniques need to be used to solve these problems optimally. For some problems, geoprocessing tasks might be the right solution. But some other problems that involve domain/project-specific business rules and workflows can be tackled better with the use of Server Object Extensions (SOEs). SOEs provide developers with a fast, reliable, and scalable way of building GIS solutions using ArcGIS Server. This presentation will go over some of the finer points of developing SOEs and will present some Visual Studio project templates to make development a little bit easier. It will also go over wiring up a setup project for deploying SOEs. Finally, a RESTful service developed using SOEs and WCF to complement the ArcGIS Server REST API and enable editing data exposed in MapServices will be demonstrated.

Print & Legend Web Services for the ArcGIS JS API or Web ADF

1:00 PM –1:45 PM • Oasis 1, PSCC

Presenter(s): Marianne Cardwell, Woolpert

The ArcGIS JavaScript API released with ArcGIS 9.3 opened up a whole new set of Web development possibilities, but it comes with two major drawbacks: the lack of reliable, high-quality printing and the lack of a dynamically created legend including legend swatches. To solve these limitations, the City of Indianapolis, Indiana, modified its existing print Web service designed for use with the Web ADF so that it could be used with Web sites developed using the ArcGIS JavaScript API. The result is a high-quality PDF map including a legend, north arrow, scale bar, and text elements. Additionally, the city has created a legend service that provides the legend swatches necessary to create a legend to be displayed on a Web site. This service can be used with any Web site using an ESRI map service. This presentation will go over the two services and explain how they were created, focusing on the advantage of a service-oriented architecture.

Flex, REST, WMS and Distributed Processing for Economic Development

2:00 PM –2:45 PM • Oasis 1, PSCC

Presenter(s): Robert Cheetham, Avencia

Priority Places is an interactive mapping application designed to strengthen quality economic development investment in the City of Asheville. The online software enables business owners, citizens, or government agencies to weigh multiple geographic factors and generate a map that highlights optimal locations for their activities. The application was needed to support high-performance execution of raster map algebra functions while providing an interactive and responsive user interface. It also needed to be deployed using ArcIMS, but support transfer to ArcGIS Server in the future. The innovative system architecture combines a REST API, OGC WMS, and a distributed processing system with a user interface constructed using the Adobe Flex system. Business and demographic reporting is provided with ESRI Business Analyst Online Web services. The presentation will discuss the architecture and demonstrate the application.

Implementing a Custom Image Server Raster Format

3:00 PM–3:45 PM • Oasis 1, PSCC

Presenter(s): Michael Rosen, LizardTech

The Custom Image Server Raster Format is a simple but powerful server-side extension mechanism that allows developers to leverage the flexibility and scalability of the ArcGIS Server platform onto many problem-specific workflows. LizardTech (LT) recently implemented one of these. The latest revision of LT's widely distributed free plug-in for ArcGIS uses this technique to extend support for the newest generation of ArcGIS Server. Our application allows our customers high-performance access to their LT Express Server-based JP2 and MrSID images directly from ArcGIS Server. Our presentation will describe the impetus for the project and our subsequent implementation experience. We will describe the coding of the FormatCorePlugin callbacks, related installation/configuration issues, and overall results.

Intro to Agile Software Development

4:00 PM–4:45 PM • Oasis 1, PSCC

Presenter(s): Chris Spagnuolo, Rally Software Development

You've heard the buzzwords, and everyone around you seems to be "doing Agile." But just what are Agile practices and where do they come from? And what makes them work so well? In this session, we'll review a brief history of Agile and provide some concrete numbers of how Agile practices stack up against other software development methodologies. We'll also explain the Scrum framework for Agile development. Scrum is the guiding set of patterns and practices for many Agile teams. It helps enable a collaborative environment that readily accepts change as the norm in complex software development projects. It provides the basis for the iterative and incremental delivery of high-quality, valuable working software to customers very quickly.



Thursday, March 26 | Session Descriptions

Track Codes

APP	Applications
MIG	Migration
PT	Products and Technology

8:30 AM–9:45 AM

Building Great Web Maps Using ArcGIS (APP)

8:30 AM–9:45 AM • Primrose A, PSCC

Presenter(s): Bernie Szukalski, Clint Brown

GIS continues to grow as the Web expands. New consumer mapping technology, such as Google Earth and Microsoft Virtual Earth, has captured many people's imaginations and is influencing end-user expectations for Web maps provided by the GIS user community. Meanwhile, GIS communities are buzzing about Web 2.0 and, more specifically, the GeoWeb. Many GIS practitioners see big opportunities, but they also see many challenges. The goal of this session is to present lessons learned and best practices for publishing Web maps using ArcGIS. New approaches make it possible for any ArcGIS user to create great looking Web maps. In this session, you will learn how to use ArcGIS to create multiscale basemaps, build map overlays, define map layers that provide information popups and interactive reports, create great cartography for use in your Web maps, and deploy using ArcGIS Explorer and the ArcGIS Server Flex API. Deploying to Web maps such as Microsoft Virtual Earth, Google Earth, and ArcGIS Online will also be discussed. This session targets all levels of expertise and all audiences (managers, GIS professionals, IT/developers).

Prerequisites: None

Developing Advanced Applications with the ArcGIS JavaScript API (PT)

8:30 AM–9:45 AM • Primrose B, PSCC

Presenter(s): Jayant Sai, Jeremy Bartley

This session will show developers how to take an HTML and JavaScript Web application to the next level. The session will discuss techniques for building and using Dojo Dijits, examples of how to write custom layers, ways of extending the ArcGIS for API JavaScript classes, debugging techniques, options for printing from a Web application, and integration with other JavaScript libraries.

Prerequisites: ArcGIS Server, JavaScript, HTML

Working Effectively with the Geodatabase Using SQL (PT)

8:30 AM–9:45 AM • Primrose CID, PSCC

Presenter(s): Kevin Watt, Tom Brown

Applications can interact with the geodatabase through SQL. Writing efficient SQL with spatial attributes requires an understanding of the data type's architecture and operators. This session will introduce the audience to the ST_Geometry model, spatial index, and relational and geometry operators. It will also focus on proper SQL syntax to ensure optimal execution and utilization of the spatial index.

Prerequisites: SQL and a basic understanding of geodatabase versioning

Developing Defense Applications Using Military Analyst and MOLE (PT)

8:30 AM–9:45 AM • Mesquite C, PSCC

Presenter(s): Derek Foll, Chris Moore

Military Analyst and MOLE enhance the defense and intelligence developer's ability to do coordinate conversion, geodetic measurement and display, and military overlay symbology. This session will briefly cover an introduction to the defense solutions API and development paradigm. Developers will see the work done through samples and best practices to leverage their own applications with Military Analyst and MOLE. Chris Moore will be a copresenter.

Prerequisites: None

ESRI Product Licensing (APP)

8:30 AM–9:45 AM • Smoketree A–E, PSCC

Presenter(s): Damian Spangrud, John Baleja, Rich Turner, Rob Elkins, Scott Culbertson

This session will present the opportunity to ask questions regarding ESRI product licensing. Topics will include concurrent and single use licensing of desktop software, license manager software and configuration, production versus development server licensing, runtime licensing, remote workstations and virtualization, OEM options, licensing and the ESRI Developer Network (EDN), and enterprise license agreements. Much of the session will be devoted to an interactive discussion and Q&A time.

Prerequisites: None

Customizing Graphics and MapTips with the .NET Web ADF (PT)

8:30 AM–9:45 AM • Catalina/Madera, Wyndham Hotel

Presenter(s): Rex Hansen, Richard Zwaap

Microsoft Silverlight provides a cross-browser, cross-platform development environment for building and delivering rich interactive applications for the Web. The ArcGIS API for Microsoft Silverlight enables you to integrate ArcGIS Server and Microsoft Virtual Earth services and capabilities in a Silverlight application. You can create interactive and expressive Web applications leveraging ArcGIS Server and Virtual Earth resources—such as maps, locators, and geoprocessing models—and Silverlight components—such as grids, treeviews, and charts. This session will demonstrate and discuss the capabilities and features of the ArcGIS API for Microsoft Silverlight.

Prerequisites: Familiarity with Microsoft Silverlight helpful, but not required

Developing for the GeoWeb: Notes from the Field (APP)

8:30 AM–9:45 AM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): Allan Laframboise, Dave Bouwman

The GIS community is faced with a number of challenges and opportunities today when developing applications for the GeoWeb. In this session, guest speaker Dave Bouwman (blog .davebouwman.net) will discuss what to consider when developing GeoWeb applications. Real-world examples will be used to illustrate and explain development concepts relating to map canvases, usability, interface design, back end service design, and unit testing. Some of the technologies covered will include ASP.NET model view controller (MVC), MbUnit, esri.map, and OpenLayers. Final discussions will cover how to leverage Web 2.0 tools and resources to more effectively build these applications, share ideas, and collaborate on development efforts with others in the GeoWeb community.

Prerequisites: Web development, Web 2.0 enabled

10:15 AM–11:30 AM

ArcGIS Server Performance and Scalability—Performance Factors and Optimization (APP)

10:15 AM–11:30 AM • Primrose A, PSCC

Presenter(s): Andrew Sakowicz, Eric Miller, Frank Pizzi

This session will focus on analyzing key performance factors and the root cause of typical performance problems when deploying ArcGIS Server. This knowledge can be used to implement cost-effective system improvements that will lead to higher productivity and user satisfaction. Using a bottom-up approach, we will identify critical components (e.g., data sources, geodatabase, geoprocessing, map documents, application, system architecture design, hardware, virtualization) and quantify how optimization of these components impacts overall performance and scalability.

Prerequisites: None

ArcGIS 9.4—The Road Ahead for Developers (MIG)

10:15 AM–11:30 AM • Primrose B, PSCC

Presenter(s): Ismael Chivite, Jeff Shaner, Rob Elkins Jr

In this session, plans and directions for the future of ArcGIS will be presented. The vision, new functionality, platform support, and other topics regarding our next release (9.4) will be discussed.

Prerequisites: None

Implementing ArcGIS Mobile Applications for the Enterprise (APP)

10:15 AM–11:30 AM • Primrose CID, PSCC

Presenter(s): Michael Miller, Myles Sutherland

ArcGIS Server and the ArcGIS Mobile SDK allow developers to build and deploy a complete, end-to-end mobile solution within the enterprise. This session will cover system architecture; best practices; building effective, scalable information; and transactional models to support a large number of field-workers. Also covered will be designing maps with purpose, cost-effective data and application deployment strategies, and recommended back-office QA methodologies. Development strategies and the technical details of building such a system will also be discussed, and real-world examples will be provided.

Prerequisites: Mobile technologies

10:15 AM–11:30 AM *(continued)*

Deploying ArcGIS Desktop and ArcGIS Engine Applications in .NET (APP)

10:15 AM–11:30 AM • Mesquite C, PSCC

Presenter(s): Don Kemlage, Mita Patel

ArcGIS developers can build custom desktop applications and deploy them to end users. This session will focus on best practices and recommendations for deploying and distributing ArcGIS Desktop and ArcGIS Engine applications. A number of topics will be covered such as the licensing and deployment options available to desktop developers, version compatibility for ArcGIS, service packs and the .NET runtime, and how to build a seamless setup program for .NET applications. Real-world applications and scenarios will be used to highlight and demonstrate the key deployment concepts.

Prerequisites: ArcObjects, .NET

Leveraging the OGC Capabilities of ArcGIS Server (APP)

10:15 AM–11:30 AM • Smoketree A–E, PSCC

Presenter(s): Jessica Parteno, Satish Sankaran, Yingqi Tang

ArcGIS provides client and server capabilities for working with Open Geospatial Consortium, Inc. (OGC), data and services. ArcGIS Server allows attendees to expose WCS, WFS, and WMS services to clients that can consume them. This session will show case how to integrate and expose these services with ArcGIS Server. Also covered will be the various customization options and functionality related to the OGC capabilities. Different client applications will be used to highlight and demonstrate key concepts. The presentation will cover various use case scenarios and recommended workflows.

Prerequisites: None

Patterns and Best Practices for Building Applications with the ArcGIS API for Microsoft Silverlight (APP)

10:15 AM–11:30 AM • Catalina/Madera, Wyndham Hotel

Presenter(s): Art Haddad, Morten Nielsen, Rex Hansen

The Microsoft Silverlight platform provides a comprehensive framework for consolidating data sources and services as well as building reusable, expressive, and interactive components for the Web. Microsoft Expression Blend enhances Silverlight development by providing an interactive, aesthetic design surface for styling Silverlight content. The ArcGIS API for Microsoft Silverlight builds on standard Silverlight platform patterns and tools. This session will discuss best practices for integrating and enhancing the use of ArcGIS Silverlight components with respect to data binding, control templates, and XAML/code-behind patterns.

Prerequisites: Intermediate level experience with Microsoft Silverlight, .NET, and Expression Blend

An Overview of the ArcGIS JavaScript APIs (PT)

10:15 AM–11:30 AM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): Jayant Sai, Jeremy Bartley

ArcGIS Server 9.3 introduced the ArcGIS for API JavaScript and ArcGIS JavaScript extensions for Google Maps and Virtual Earth that are powered by a REST API. This session's attendees will learn about these APIs and explore the online SDKs. The main focus will be to show developers how to build applications with each of the JavaScript APIs by walking participants through the online samples in the SDK and covering best practices.

Prerequisites: ArcGIS Server, JavaScript, HTML

1:30 PM–2:45 PM

Patterns and Best Practices for Building Applications with ArcGIS API for JavaScript (APP)

1:30 PM–2:45 PM • Primrose A, PSCC

Presenter(s): Jeremy Bartley

GIS professionals have many different options for building Web GIS applications. The user experience and expectations are different if you are tasked with building an application for the general public versus an application for someone in your organization. This session will look at several JavaScript applications and walk through development scenarios to help answer questions from how to move beyond trying to build an application that tries to do everything to building something that is targeted and communicates useful geographic information to the end user. How do you represent operational layers in the browser? How do you represent layers that change frequently? And how do you successfully do thematic mapping on the client?

Prerequisites: ArcGIS Server, JavaScript

Patterns and Best Practices for Building Applications with ArcGIS API for Flex (APP)

1:30 PM–2:45 PM • Primrose B, PSCC

Presenter(s): Antony Jayaprakash, Mansour Raad

GIS professionals have many different options for building Web GIS applications. The user experience and expectations are different if you are tasked with building an application for the general public versus an application for someone in your organization. This session will look at several Flex applications and walk through development scenarios to help answer questions from how to move beyond trying to build an application that tries to do everything to building something that is targeted and communicates useful geographic information to the end user. How do you represent operational layers in the browser? How do you represent layers that change frequently? And how do you successfully do thematic mapping on the client?

Prerequisites: ArcGIS Server, Flex

Building and Optimizing Geoprocessing Services for ArcGIS Server (APP)

1:30 PM–2:45 PM • Primrose CID, PSCC

Presenter(s): Nathan Warmerdam, Scott Murray

ArcGIS Server allows users to create geoprocessing services that leverage hundreds of out-of-the-box tools in the core product. This session will demonstrate how to convert existing workflows (models, scripts, etc.) from nongeneric tools into tools that can be published as fast and efficient services. In addition, topics such as server configuration and service properties will be discussed in the context of server performance. A case study will be used to demonstrate the methods discussed and to highlight tips and tricks for common user problems.

Prerequisites: Geoprocessing, ModelBuilder

Customization with the ArcGIS Server Image Extension (PT)

1:30 PM–2:45 PM • Mesquite C, PSCC

Presenter(s): Feroz Abdul Kadar, Prashant Mangtani

The ArcGIS Server Image extension (formerly known as ArcGIS Image Server) is used to author and serve large collections of raster data as image services, thereby providing fast access to and visualization of large quantities of imagery. It can be used on its own or as the image extension to ArcGIS Server. This session will cover how to add a custom raster type or raster format and a custom process. Through code samples, developers will learn the requirements for creating a custom raster format and steps to create a custom raster type that reads a raster format and its metadata as well as georeferencing data. Plus, learn what is necessary when creating a C or C++ DLL that can be used as a process. See how to define the process, how to define the user interface, and how to add it automatically using a raster type.

Prerequisites: Raster file formats, ArcGIS Image Server, C++

Building ArcGIS Applications for AutoCAD (APP)

1:30 PM–2:45 PM • Smoketree A–E, PSCC

Presenter(s): Don Kuehne, Karen Hodge

ArcGIS for AutoCAD Build 200 is an example of integrating ArcGIS Server functionality with a popular desktop application. In this session, attendees will learn how to write a .NET application that works within AutoCAD, how to call ArcGIS for AutoCAD functions from a .NET application, how to use ESRI's new Mapping Specification for Drawings (MSD) without ArcGIS for AutoCAD to prepare AutoCAD drawings for merging into a geodatabase, and how to access geoprocessing functionality from within the AutoCAD environment. Developers will find out how to leverage MSD GIS data structures in AutoCAD applications to promote GIS/CAD interoperability by managing coordinate systems, feature classes, and feature attributes using AutoCAD graphic and nongraphic entities.

Prerequisites: ArcGIS Server, Best Practices for Designing Web Maps session

Advanced Map Caching Topics (PT)

1:30 PM–2:45 PM • Catalina/Madera, Wyndham Hotel

Presenter(s): Sterling Quinn, Tom Brenneman

This session will focus on best practices for large caching jobs. The presenters will discuss choosing appropriate cache scale levels and image formats. They will also present advanced strategies for caching based on feature class boundaries, updating caches on a regular basis, and creating tiles on demand. Attending the Best Practices for Designing Effective Map Services session before attending this session is highly recommended.

Prerequisites: AutoCAD

ArcGIS Server Performance and Scalability—Testing Methodologies (APP)

1:30 PM–2:45 PM • Pasadena/Sierra/Ventura, Wyndham Hotel

Presenter(s): Andrew Sakowicz, Frank Pizzi

For many projects, performance is the Achilles' heel. Performance problems expose the enterprise to business inefficiencies and, potentially, the failure of critical business components. Testing, monitoring, and tuning your environment will pay off in an application that minimizes cost, maximizes return on investment, and delivers the performance users need to meet business goals. In this session, we will demonstrate performance testing methodologies for ArcGIS Server deployments and show how testing can be used to collect performance baselines, identify bottlenecks, use existing resource capacity more efficiently, and verify that the system meets the required performance level of service. In this session, we will cover how to write scripts for testing various frameworks and APIs including ADF AJAX, Tasks, REST API, SOAP API, data-driven unit tests, and desktop application testing. Finally, we will demo different performance tools including Microsoft Visual Studio 2008, Apache JMeter, HP LoadRunner, Borland SilkPerformer, and NRG AppLoader.

Prerequisites: None



ESRI Showcase

Oasis 1, PSCC

Meet directly with ESRI staff at customized product and program islands. Check out demonstrations and get your most pressing questions answered by technical, sales, services, and marketing staff.

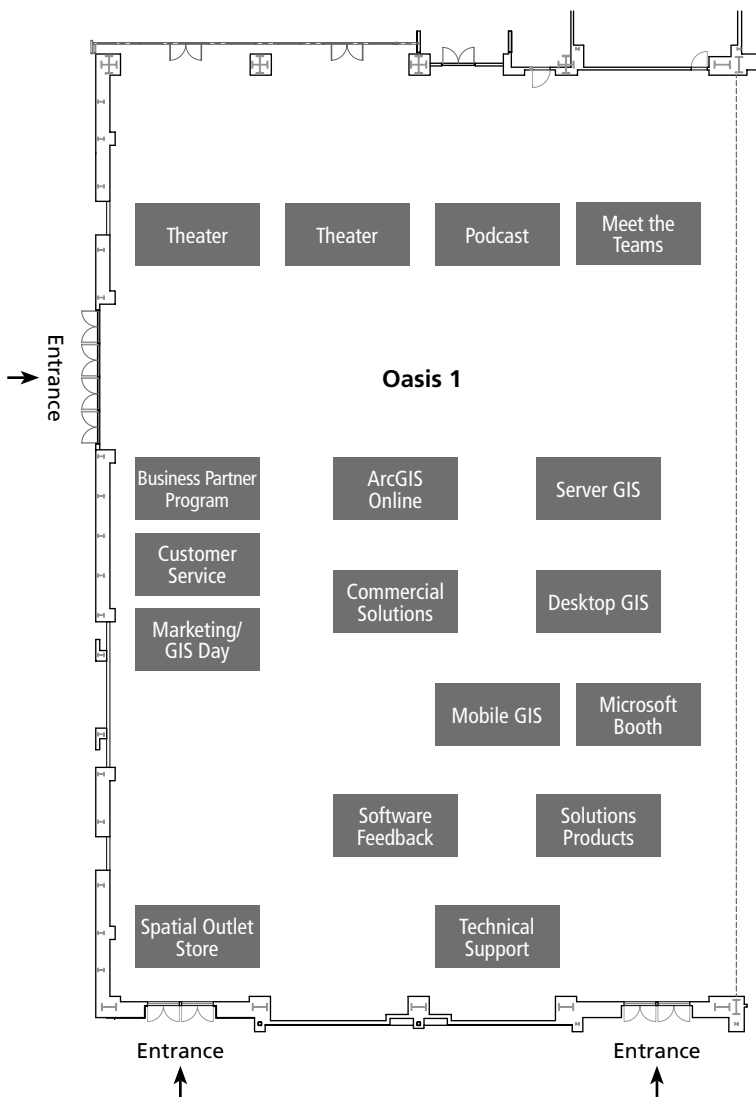
Showcase Hours

Monday, March 23 • 11:00 AM–7:00 PM

Tuesday, March 24 • 12:30 PM–6:00 PM

Wednesday, March 25 • 10:00 AM–4:30 PM

Showcase Floor Plan



ArcGIS Online

ArcGIS Online provides services, searching, and sharing capabilities to ArcGIS users. ArcGIS Online hosts basemap and location services you can use in your ArcGIS software and applications. As part of the GIS community, you can share and discover geographic information within and across organizations. Visit the ArcGIS Online Island to learn firsthand from the ArcGIS Online team how these capabilities can help you and your organization. You can also see how ArcGIS Online can be used with ArcGIS Explorer, ESRI's free application for exploring, assembling, and presenting geographic information.

ArcGIS Content (Part of the ArcGIS Online Island)

ArcGIS products provide access to a rich and varied set of geographic content. Visit the ArcGIS Content Island to learn about ESRI's data products and online services for use with your ArcGIS software, including ESRI Data & Maps, ESRI StreetMap Premium, ArcGIS Data Appliance, and ArcGIS Online services. These products and services provide access to terabytes of imagery, street data, administrative boundaries, topographics maps, demographics, and much more. Learn firsthand from the content products team how these data and services can help you and your organization.

Business Partner Program

Business Partner Program staff will be on hand to answer questions about the many programs, resources, and opportunities available to partners. We are also pleased to announce the launch of the new BP Support Center for business partners. This new benefit provides you with a fast, convenient, and efficient way to connect with the ESRI Business Partner Program staff for Business Partner Program-related questions. Other highlights include the Solutions Directory, Partners Only Web site, Partner Profile, and marketing your business partner solutions and services.

Commercial Solutions

Visit the Commercial Solutions Island to see software solution products that support many business functions relating to business intelligence, continuity planning, supply chain management, market planning, territory and site analyses, and route optimization.

The Business Analyst product suite (server, desktop, and online) will be featured, as well as ArcLogistics, BusinessMAP, and RouteMAP IMS. In addition, you will also be able to see how ESRI's data products (demographic, consumer spending, and business data) can deliver maximum value for your organization in this economic climate.

Desktop GIS

This island will feature ArcGIS Desktop and ArcGIS Engine. Stop by to learn about the core capabilities of ArcGIS Desktop including

- Data visualization
- Spatial analysis and modeling
- Cartography
- Data use and management
- Geographic data editing

In addition, ESRI staff will be on hand to also discuss how you can use the APIs and visual controls in ArcGIS Engine to leverage core ArcGIS capabilities to build focused GIS applications including applications featuring dynamic display. Find out more about what's coming in ArcGIS 9.3.1 to improve the performance of dynamic map publishing and increase the sharing of geographic information.

GIS Day/ESRI Marketing Island

Stop by the GIS Day/ESRI Marketing Island to get the latest information on ESRI, its publications, and GIS Day.

GIS Day

Discover how you and your organization will benefit from hosting a GIS Day event. Whether you are a veteran participant or new to GIS Day, we encourage you to stop by the GIS Day booth to register your event, get ideas, and see the resources that are available to help plan and promote your next GIS Day celebration. Mark your calendar; the 11th annual GIS Day celebration will be Wednesday, November 18, 2009.

ESRI Marketing

Learn about the various magazines and newsletters ESRI publishes to keep you informed of the latest ESRI news and events throughout the year. Pick up a copy of the latest issue of *ArcNews* to find a multitude of case studies and best practices or a copy of *ArcUser*, ESRI's other quarterly magazine, for more technical GIS information.

Mobile GIS

- ArcPad
- ArcGIS Mobile

Mobile GIS enables field-based personnel to capture, update, analyze, and display geographic information. ESRI mobile products being demonstrated include the ArcGIS Mobile out-of-the-box application, the ArcGIS Mobile Software Development Kit (SDK), and ArcPad 8. Staff will be available to discuss the use and development of mobile mapping and navigation applications including field mapping, GPS tracking, asset inventory and maintenance, inspections, incident reporting, and GIS analysis.

Server GIS

The Server GIS Island is the place to visit if you want to learn more about working in a rapid application development environment for creating fast, high-quality mapping applications and delivering GIS analysis on the Web.

With ArcGIS Server, you can manage and disseminate maps, imagery, geodatabases, geoprocessing tools, and networks as services that can be used in desktop, mobile, and browser-based applications. Learn how to create mashups using APIs for JavaScript, Flex, and Silverlight. Talk to the experts about creating powerful custom .NET and Java Web applications and find out about tools for managing security and improving performance. Learn about extensions for ArcGIS Server including Image, Network, and Data Interoperability. Find out about storing and managing your geospatial data in the geodatabase. Also get your questions answered about running ArcGIS Server in Windows, Solaris, and Linux environments. Come by the Server GIS Island and talk to us about your Web GIS projects!

Showcase Demo Theater

Come hear from ESRI software development staff on a wide range of topics and products. Each short presentation will feature developer-focused demonstrations and best practices along with time for questions and answers with development staff.

Software Feedback

The ESRI software development team wants your input on the current quality of ArcGIS software as well as your ideas on how to improve future releases. Help us understand your workflow scenarios and find ways in which you can become more productive and efficient with your work. Understanding your workflows is critical for us to help test and build better software. We are very interested in your feedback. We will have resources available to submit your enhancements, which will be made available to the software development team.

Solutions Products

Learn about specialized ESRI solution products and how they can fit the needs of your business.

- **PLTS for ArcGIS**—Lets customers efficiently produce geospatial data, maps, and charts that adhere to industry- and organization-specific requirements. Specific solutions are also available for aeronautical, nautical, and defense mapping organizations.
- **Job Tracking for ArcGIS (JTX)**—This enterprise workflow management system lets customers create, organize, and standardize GIS workflows and orchestrate all staff involved, regardless of function, from a centrally located, spatially enabled dashboard.
- **ArcGIS Defense Solutions**—Let defense and intelligence customers create workflows, processes, and symbology that allow decisions to be executed more precisely and rapidly. Solutions include Military Analyst, MOLE, and Grid Manager.
- **GIS Portal Toolkit**—GIS Portal Toolkit has become a fully integrated extension to ArcGIS Server. Organizations use GIS Portal Toolkit to catalog the diverse and changing geospatial resources within their enterprise and provide quick access to them regardless of their location or type. Based on open standards, it provides a fully supported, stable platform for building geospatial portals, spatial data infrastructures (SDIs), and metadata catalogs.

Technical Support

The Technical Support Island provides one-on-one support for specific technical questions regarding released ESRI products. Senior support specialists will be available by appointment and for walk-in service to answer questions and discuss developer-related product usage issues you may have. Members of the User Advocacy Group (UAG) will also be available to answer questions specifically related to bugs with released software. Major technology areas covered will be the ArcGIS APIs and SDKs as well as use and administration of ArcGIS Server and geodatabases.

User Presentation Area

The developers who are designing, building, and implementing GIS-based applications and systems are the most important contributors to the summit. Head to this portion of the ESRI Showcase to hear from your peers as they share their work in 25- to 30-minute live presentations. Explore the experience, ideas, and achievements of your fellow developers. Examine complete applications and discuss development practices and coding techniques using ESRI's or other's APIs. See creativity showcased in this collaborative and organized setting. Some of the topics covered will include useful tools and functions you can code share, coding conventions, testing techniques, update practices, and integration of ESRI technologies with other third-party technologies.

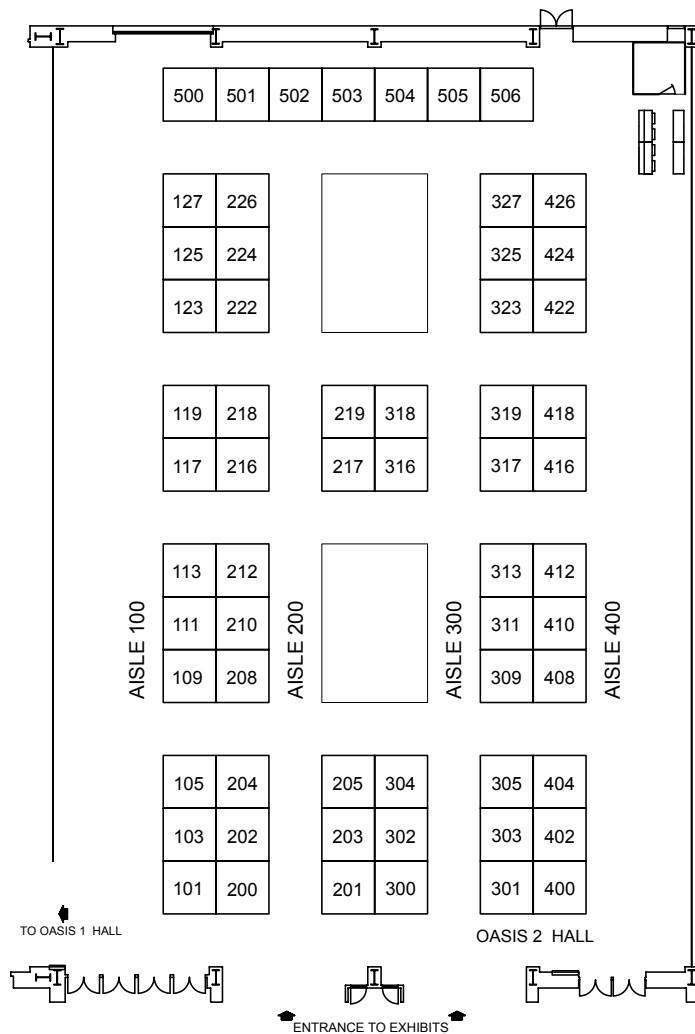
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Exhibitor Floor Plan and Booth Locations



Booth Company

Booth	Company
101	GeoSpatial Experts
113	Blue Dot Solutions
117	GIS Solutions, Inc.
119	General Dynamics Itronix
200	First American Proxix Solutions
201	Iwane Laboratories, Ltd.
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212	RouteSmart Technologies
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305	Magellan Navigation
309	American Digital Cartography, Inc. (ADCi)
311	3-GIS
313	Juniper Systems, Inc.
316	Skygone Inc.
317	IBM
318	Spatial Dimension
319	Stratus Technologies
323	ESEA
325	ITT Visual Information Solutions
327	EnerGov Solutions
412	GALIGEO Solutions
418	NorthSouth GIS LLC
422	Sun Microsystems
502	First Interactive AS
503	INLINE Corporation
504	Overwatch Geospatial

Exhibitor Descriptions

3-GIS—311

www.3-gis.com

3-GIS is a premier GIS software development and services company providing customized software and solutions to a variety of companies in the Utilities, Telecommunications and Homeland Security markets. We build, interface and integrate many diverse AM/FM systems, work management systems, analysis packages and other specialized software.

American Digital Cartography, Inc. (ADCi)—309

www.adcworldmap.com

ADC WorldMap is a world-wide leader in providing the most comprehensive and seamless geographic data for the whole Earth! Along with numerous detail rich layers, ADC WorldMap Digital Atlas v5.2 provides the most current Country and Level 1 administrative boundaries for the entire world, accurate coastlines, and flexible licensing options.

Blue Dot Solutions—113

www.bluedotsolutions.com

Blue Dot is an enterprise mobile software and products company. Within our mNOW! Mobile Framework, the mCORE! Command Center provides mobile application provisioning and device management functionality, combined with Location Based Services technology to graphically view the location of all physical assets (person or devices) via embedded ArcGIS mapping technology.

CartêGraph—202

www.cartegraph.com

CartêGraph provides ArcGIS software-based management solutions for organizations striving to make better decisions and ultimately improve productivity, efficiency and quality. CartêGraph's foundation, flexTECHNOLOGY, offers feature, functionality and integration options for the inventory and management of infrastructure assets, work orders and requests in an office and mobile environment.

Citilabs—222

www.citilabs.com

Market-Leading Software Solutions for Transportation and Land Use Planning. Citilabs is the creator of Cube, an integrated suite of transportation planning software used around the globe. Currently Cube consists of 8 modules, including Cube Voyager and Cube Avenue, which offer newly advanced tools for transport modeling.

Citrix Online—302

www.citrixonline.com

Demonstrate, market and support GIS applications in real time using GoToAssist and GoToMeeting—Web-based products from Citrix Online. GoToAssist allows you to use multiple connection methods to instantly resolve customer technical issues. GoToMeeting allows you to present, train and collaborate online.

ECONOVA—218

www.econova.ca

Headquartered in Quebec city, Québec, ECONOVA is a premier provider of business solutions to government and commercial entities. Our solutions leverage the locational attributes of information resources bringing strategic value and operational efficiencies to the enterprise.

EnerGov Solutions—327

www.energov.com

GIS-centric enterprise software solutions that manages permitting, planning, licensing, enforcement, and regulatory land-use operations

ESEA—323

www.esea.com

ESEA, the leader in map conflation software for the ArcGIS platform, has been supplying the industry with the most powerful cost-effective solutions for extracting and integrating information from multiple vector data sources since 1997. MapMerger products are used worldwide by local, state, and federal governments, utilities, universities, and corporations.

Europa Technologies Ltd.—301

www.europa.uk.com

Europa Technologies is a leading manufacturer of global map data products. The company's maps are used by premier Internet-based services, Global Fortune 500 companies and several missions of the United Nations. We are an ESRI International Business Partner and offer great reseller opportunities to ESRI distributors and resellers.

First American Proxix Solutions—200

www.proxix.com

First American Proxix Solutions, a member of The First American Corporation (NYSE: FAF) family of companies, is a leading developer of geospatial software, databases and solutions, which deliver the locational insights that businesses need to make informed decisions, understand and mitigate risks, ensure regulatory compliance and increase revenue.

First Interactive AS—502

www.first-interactive.com

First Interactive AS is a Norwegian software company offering advanced solutions, applications, and professional services within the field of real-time 3D visualization and simulation.

The company's clients include oil companies and government agencies as well as privately owned companies from various industries, all of them in need of real-time 3D solutions.

GALIGEO Solutions—412

www.galigeo.com

GALIGEO specializes in the integration between Business Intelligence Systems (Business Objects, Cognos, etc.) and ESRI.

Our products enable organizations to:

- Integrate GIS into Reports through Webigeo and WebIntelligence
- Drive performance through a Geo-Dashboard

Our industry focus is mainly on the Retail, Utilities (Energy, Water, Telecoms) and Government lines of business.

General Dynamics Itronix—119

www.gd-itronix.com

Based in Spokane, Washington, General Dynamics Itronix is a world-class developer of wireless, rugged computing solutions for mobile workers, offering a full range of field computing systems including laptops, ultra mobile notebook PCs and tablet PCs.

GeoSpatial Experts—101

www.GeoSpatialExperts.com

GeoSpatial Experts developed GPS-Photo Link, software that maps your photos. GPS-Photo Link creates ESRI shapefiles, Google Earth files, and Web pages with watermarked photographs and maps. GeoSpatial Experts resells the Ricoh GPS enabled digital camera. ArcPad edition also available.

GIS Solutions, Inc.—117

www.gis-solutions.com

Established as a full service Geographic Information System (GIS) consulting firm in 1992, GIS Solutions, Inc. provides GIS products and services to federal, state, local and private sector clients, including Fortune 500 companies. GIS Solutions' corporate headquarters is located in Springfield, Illinois with a regional office located in Chicago.

DevSummit Sponsor and BPC Platinum Sponsor**IBM—317**

www.ibm.com/government/esri

IBM, together with ESRI, offers secure, open, and reliable technology that has been engineered and tested together to provide world-class GIS. Our strategic alliance combines the strengths of both companies to offer fully integrated solutions from the user level to the entire enterprise for maximum performance.

**i-cubed—304**

www.i3.com

i-cubed offers geospatial information solutions for commercial/government customers. Our solutions leverage imagery of Earth for visualization and engineering applications including, but not limited to internet portals, wireless telecom and military planning. We offer a full range of products and services including imagery, processing to customer specifications, analysis and distribution.

BPC Gold Sponsor**INLINE Corporation—503**

www.inlinecorp.com

Via an exclusive Corporate Alliance between ESRI and INLINE you now have The Complete Advantage of GIS Solutions waiting for you. These turnkey systems save you time, human capital dollars and critical bottom line IT dollars via the ONLY preconfigured, fully tested and ESRI-backed solution.



ITT Visual Information Solutions—325

www.ittvis.com

Visit ITT to learn more about ENVI, the complete image processing solution for extracting information from geospatial imagery. See demonstrations on ENVI tools for feature extraction, change detection, image classification, target detection, and integration with ArcGIS and the upcoming release of our image processing extension for ArcGIS.

BPC Gold Sponsor**Iwane Laboratories, Ltd. (Japan)—201**

www.iwane.com/en

Iwane operates as 3D 360 degree Video Imaging Company that offers related to 3D Video GIS,

CV Technologies RCG and Auto Creation of 3DCG. Iwane has released "Active Link Vision for ArcGIS" which runs with ESRI's ArcView 9.2 or higher.

Juniper Systems, Inc.—313

www.junipersys.com

Juniper Systems, Inc. provides the ultra-rugged Archer Field PC for mobile GIS/GPS. The Archer runs ArcPad applications, providing the ability to capture, display, and analyze geographic information in the field. Built for use in the harshest environments, the Archer is waterproof, shockproof, and works in temperature extremes and high humidity.

Exhibitor Descriptions

Laser Technology, Inc.—303

www.lasertech.com

Map More. Move Less. Introducing the TruPulse 360—the smallest and most affordable “all-in-one” distance, height, compass laser. Easily integrate with GPS and perform laser offsets to position any remote feature. {Distance/Azimuth}+{GIS/GPS} = The Future of Positioning Technology. Add height, width or elevation data as an attribute. Demo the TruPulse 360 online at www.lasertech.com/360.

Latitude Geographics Group Ltd.—208

www.geocortex.com

A division of Latitude Geographics Group Ltd., Geocortex provides a suite of proven products, services and knowledge that organizations can use to deliver effective, successful Web-based mapping using ESRI's ArcGIS Server and ArcIMS. With success stories across North America, we help clients create top-notch Web-based GIS implementations.

LizardTech—205

www.lizardtech.com

LizardTech creates state-of-the-art software products and solutions that enable governments and businesses to manage and distribute massive, high-resolution geospatial data such as aerial and satellite imagery. LizardTech pioneered MrSID, a powerful wavelet-based image encoder, viewer, and file format, and sits on the Technical Committee of the Open Geospatial Consortium (OGC).

Loquendo S.p.A.—224

www.loquendo.com

Loquendo is a global player in the speech technologies market with over 30 years of R&D experience in the field! Loquendo's high quality Text-To-Speech (TTS) and Speech Recognition (ASR) products are available in over 25 languages and 60 voices. Our products can be seen on devices such as car navigators, PDAs, mobile phones, etc. and of course, ESRI's ArcLogistics Navigator!

Magellan Navigation—305

www.pro.magellanGPS.com

GPS manufacturer for GIS data collection and mapping.

NAVTEQ—216

www.navteq.com

Businesses depend on NAVTEQ GIS products to build comprehensive geomarketing solutions that enable the efficient management of facilities and support sales initiatives. From inspiration to innovation, rely on accurate, comprehensive, and fresh map data from NAVTEQ.

NorthSouth GIS LLC—418

www.northsouthgis.com

NorthSouth GIS LLC is a GIS-centric software implementation and development firm. We offer a wide range of services, from project management to GIS software implementation and development. Focus areas are Web interfaces, workflow management, and field-to-enterprise integration. Regional strengths include Southern California, Colorado, New Zealand, India, and the Middle East.

Overwatch Geospatial—504

www.geospatial.overwatch.com

Overwatch Geospatial Systems is the preferred geospatial and imagery software solution provider to the U.S. Intelligence Community and Unified Commands. Overwatch Geospatial products include RemoteView, ELT/Series, Feature Analyst, LIDAR Analyst, Urban Analyst, InterSCOPE and ASIS Zoom 500. Overwatch Geospatial Systems is an operating unit of Textron Systems.

Quarry One Eleven Ltd.—300

www.quarry-one-eleven.com

Quarry One Eleven is dedicated to selling, marketing and publicising geospatial products in the Europe, Africa and Middle East marketplaces. If you are looking to expand your sales into new territories or want help with existing international opportunities come and talk to us.

RouteSmart Technologies—212

www.routesmart.com

RouteSmart Technologies, Inc. develops, markets, licenses and supports RouteSmart for ArcGIS—an advanced GIS-based route optimization system used globally by leading organizations in the newspaper, postal, public works, and utility industries. RouteSmart for ArcGIS operates in all current ArcGIS Desktop environments and is a complete solution for route planning.

BPC Gold Sponsor

Safe Software—217

www.safe.com

Safe Software is the recognized leader in spatial ETL. Its platform, FME, unleashes spatial data to be used where, when, and how it's needed. It delivers the most extensive format support for data translation and integration, and provides unlimited flexibility in data model transformation and data distribution.



SafeNet—226

www.safenet-inc.com

SafeNet is a global leader in information security. Founded more than 25 years ago, the company provides a wide range of security solutions, including encryption and licensing technologies to protect software and intellectual property. Adobe, Cisco, Microsoft, the U.S. Treasury, and other customers entrust their security needs to SafeNet.

Skygone Inc.—316

www.skygoneinc.com

Skygone offers preconfigured hosted hardware packages that allow for instant scalability of configurations based on ArcGIS Server. Come talk to us about how we leverage our unique virtualized infrastructure to enable GIS companies to easily deploy their existing software product as a “Software + Infrastructure” (SaaS) solution, for no upfront cost.

BPC Gold Sponsor**Smartsoft Technologies Inc.—219**

www.smartsofttechnologies.com

Smartsoft Technologies Inc. is an organization focused on enhancing enterprise business processes and systems by integrating them with GIS. With offices in USA, Mexico, Germany, India and Australia, partnerships with ESRI, SAP and Microsoft, Smartsoft is the preferred partner for enterprise integration.

**Spatial Dimension—318**

www.spatialdimension.com

Spatial Dimension is a multi-disciplinary software development and consulting company. Our flagship product, FlexiCadastre, is the international software of choice for both Government Agencies and Mineral Resource Companies wanting to implement integrated mineral rights management solutions.

BPC Platinum Sponsor**Stratus Technologies—319**

www.stratus.com

Stratus focuses on helping customers keep critical business operations online without interruption. Stratus delivers a range of solutions including software-based high availability, fault-tolerant servers, availability consulting and assessment, and remote systems management services.

**Sun Microsystems—422**

www.sun.com

Sun Microsystems Inc., (NASDAQ: JAVA) develops the technologies that power the global marketplace. Guided by a singular vision—“The Network is the Computer”—Sun drives network participation through shared innovation, community development and open source leadership.

Symology Ltd.—210

www.symology.com

Symology develops and supplies an advanced range of spatially enabled solutions for the management of infrastructure assets, including highways, bridges and structures, public lighting and distribution networks.

BPC Gold Sponsor**Tele Atlas**

www.teleatlas.com

Tele Atlas is a worldwide leading provider of digital maps and dynamic location content for GIS, navigation, location-based services and geospatial products and database solutions. Tele Atlas is an ESRI Corporate Alliance Partner and provides geographic datasets formatted for ESRI software. Find more at Tele Atlas, www.teleatlas.com.

**Trimble Navigation Limited—204**

www.trimble.com/mgis

A leader in GPS technology, Trimble provides services and solutions that allow its customers to achieve greater productivity, convenience and safety. Trimble also offers complete solutions for Mobile GIS to make the enterprise database directly accessible to field-based personnel, whenever and wherever it is required.



2009 ESRI Developer Summit Survey

Thank you for attending. Help us plan future summits by answering the questions below. Each survey response is read thoroughly and used to improve future events.

1. Rate the meetings/activities you attended.

	Very Valuable	Valuable	Somewhat Valuable	Less Than Valuable	Of No Value	Did Not Attend
Presummit Seminars						
Plenary Session						
Technical Sessions						
Community Center						
ESRI Showcase						
Keynote Session						
Demo Theater Presentations						
Meet the Teams						
User Presentations						
Special Interest Group Meetings						
Closing Session						

2. Do you have comments or suggestions about any of the meetings and activities listed above?

3. What topics or speakers would you suggest for future plenary and keynote sessions?

4. How would you rate the overall content of the technical sessions you attended?

	No Opinion	Not Valuable	Somewhat Valuable	Valuable	Very Valuable
Presummit Seminars					
Desktop Development					
Engine Development					
Enterprise Architecture					
Mobile Development					
Server ADF Development					
Web (Scripting) Development					
Product Feature Based					
Solutions Based					
User (non-ESRI) Presentations					

5. Do you have any comments or suggestions related to the technical sessions?

continued on back

6. Coming into the conference, what was your level of expertise in the following products and technologies?

	N/A	Beginner	Intermediate	Advance
Desktop				
Engine				
Server				
Mobile				
.NET				
Java				
JavaScript				
Flex				
Silverlight				
Python				
Other				

7. Based on what you learned at the summit, what comments do you have about the direction of ESRI software, architecture, platform support, or licensing?

8. How would you describe the length of the summit?

- It was too long.
- It was about the right length.
- It was too short.
- Uncertain.

9. Thinking about the summit as a whole, what stands out as being of greatest value to you? Why?

10. What suggestions, if any, do you have for improving future summits?

11. Will you recommend attending future ESRI Developer Summits to your colleagues?

- Yes
- Yes with some qualifications

- No

12. May we include your comments as testimonials in future ESRI promotional materials? If so, we will contact you to obtain permission before publication.

- Yes
- No

Contact Information

First Name: _____

Last Name: _____

E-mail Address: _____

Organization: _____

Thank you for your feedback.



Upcoming Conference Dates

ESRI Southeast Regional User Group Conference

April 27–29, 2009
Jacksonville, FL
www.esri.com/serug

ESRI Business GIS Summit

May 4–6, 2009
Denver, CO
www.esri.com/bizsummit

ESRI International User Conference

July 13–17, 2009
San Diego, CA
www.esri.com/uc

ESRI Education User Conference

July 11–14, 2009
San Diego, CA
www.esri.com/educ

ESRI Survey & Engineering GIS Summit

July 11–14, 2009
San Diego, CA
www.esri.com/segsummit

ESRI Homeland Security Summit

July 11–14, 2009
San Diego, CA
www.esri.com/hssummit

ESRI Health GIS Conference

September 21–23, 2009
Nashville, TN
www.esri.com/healthgis

ESRI Electric & Gas User Group

October 11–14, 2009
Atlanta, GA
www.esri.com/egug



Wyndham Hotel and Palm Springs Convention Center Floor Plan

