



**Esri International User Conference | San Diego, CA**  
**Technical Workshops | July 13-14, 2011**

# **ArcGIS API for Microsoft Silverlight – Advanced Topics**

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# Agenda

- Introductions and Overview
- Map and layer optimization
- MVVM
- WebMaps
- API Highlights



Microsoft®  
**Silverlight™**



Windows  
Presentation  
Foundation

# Map and layer optimization

- Define spatial reference instead of waiting for first layer
- Responsible use of graphics
- Resolution and scale dependency
- Selections with dynamic layers
- Simplify symbols
  - Clustering
- Generalize
- Limit attributes
- DrawMode = OnDemand

# Demo: Map and Layer Optimization



# MVVM

- MVVM: **M**odel-**V**iew-**V**iew**M**odel.
- Separate Design, Data and Logic.
- Model: User info, Data, Application state, etc.
- View: Visual Controls, Buttons, Map, Menus etc.
- ViewModel: The “glue” (ie. logic) that ties the view and model together.
- MVVM is not a framework but a “design pattern”.
  - However there are various libraries that provides helper classes. Ex: MvvmLight, PRISM, Caliburn.Micro...

# Demo: MVVM



# WebMaps

- “Map on the web”
- Author and share
  - ArcGIS Online
  - On-premise portal
- **ESRI.ArcGIS.Client.WebMap.dll**
  - Document class to load by id or JSON
  - Returns Map control and attached properties
    - Map notes = graphics layer
    - Popups = Map tips, data templates
    - Get raw JSON from  
`GetMapCompletedEventArgs.DocumentValues`





# Demo: WebMaps





# API highlights

- **ArcGIS JSON**
  - FeatureLayer, FeatureSet, Renderer, Symbol
- **Client-side spatial operations**
  - Intersection
  - Projections
- **Proxy page**
- **Debugging**
- **Concurrent requests**
- **“Extensions”**

# Demo

- Spatial Operations
- ArcGIS JSON
- Proxy
- Debugging
- Concurrent queries
- Extensions

# More Silverlight sessions!

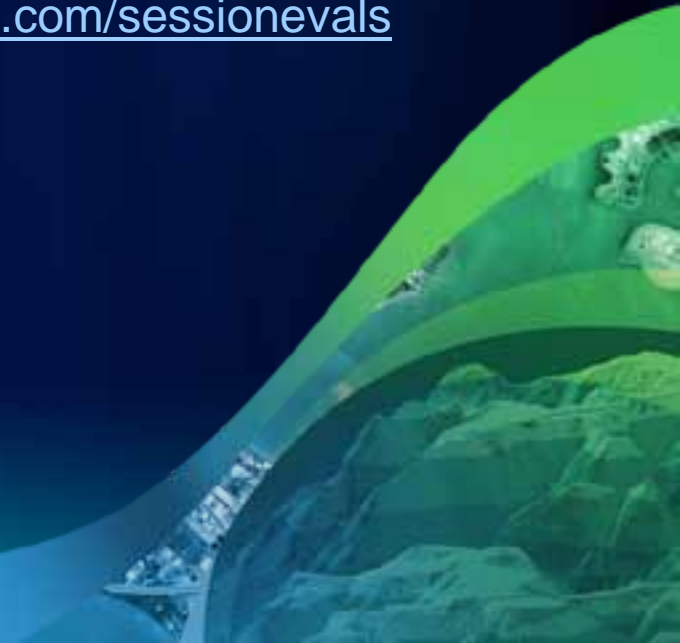
- **Silverlight - Intro**
  - **Thu 10:15 AM – 11:30 AM**  
**Room 8**
- **Silverlight Viewer - Intro**
  - **Thu 1:30 PM - 2:45 PM**  
**Room 5 A/B**
- **Silverlight Viewer - Add-Ins**
  - **Wed 11:00 AM – 12:30 PM**  
**Exhibit Hall C (Web Demo Theater)**
  - **Wed 4:00 PM – 4:45 PM**  
**Exhibit Hall C (Web Demo Theater)**

## More Silverlight sessions!

- Road Ahead - Silverlight
  - Wed 3:15 PM – 3:35 PM  
Room 6 A
- Road Ahead – WPF
  - Wed 12:00 PM – 1:00 PM  
Exhibit Hall C (Desktop Developer Demo Theater)

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