Leveraging ArcGIS JavaScript API to Enhance Web Applications

Virginia Department of Game and Inland Fisheries
Agenda

• Overview Web Mapping Options (ESRI focus)
• Why Extend Templates?
• Why JavaScript?
• Code Editors and Cloud Based IDE’s
• API Code Library and Widgets
• Closer look at ArcGIS JavaScript API
• Example Application
ArcGIS options

- **ArcGIS Online**
- Collector App
- ArcGIS JavaScript Templates
- Web App Builder
- ArcGIS App
- ArcGIS Dashboard
ArcGIS options

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ArcGIS options

- ArcGIS Online
- Collector App
- **ArcGIS JavaScript Templates**
- Web App Builder
- ArcGIS App
- ArcGIS Dashboard
ArcGIS options

- ArcGIS Online
- Collector App
- ArcGIS JavaScript Templates
- **Web App Builder (widgets)**
- ArcGIS App
- ArcGIS Dashboard
ArcGIS options

- ArcGIS Online
- Collector App
- ArcGIS JavaScript Templates
- Web App Builder
- **ArcGIS App (SDK)**
- ArcGIS Dashboard
ArcGIS options

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- ArcGIS JavaScript Templates
- Web App Builder
- ArcGIS App
- ArcGIS Dashboard
Extending Templates – Why?

- Templates do not suit your Agencies needs
- Modification of template queries
- Enhanced Symbology & Rendering
- Embeding your app in existing websites
- Enhancing the overall look and feel of the application

- ESRI has developed various API’s and SDK’s
- Don’t need expert coders to implement additional functionality
  - ESRI Support, Forums, Online API documentation
Why JavaScript

- Delivers a lightweight web GIS
- Pervasive
  - Cross-platform, cross browser, plugin-less
- JS Frameworks abstract away the browser complexity
  - Dojo, jQuery, YUI, EXTJS
- IDE’s are getting better
  - Aptana, Notepad++, Visual Studio
Code Editors / Cloud Based IDE’s

- Coda
- Aptana
- Notepad++
- Sublime Text 2
- WebStorm
- Komoda
- Visual Studio
  - JS API Code Assist

- JS Fiddle (no web server needed)
- Maqetta
API Code Library
- Map Control
- Support for Webmap
- Layers
- Graphics
- GP Tasks (Pub. Services)
- Geometry
- Symbology / Rendering
- Queries

API Widgets
- Legend
- Geocoder
- Directions
- Bookmarks
- Measurement
- Popups
- Print
- Basemaps
- Drawing tools
- Identify Manager
ArcGIS API for JavaScript

Get started
Reference the ArcGIS JavaScript API from our CDN and you are ready to get started.

Code samples
Dive into a huge collection of samples that demonstrate functionality included with the API.

API reference
Browse our detailed API reference and learn about the wide variety of classes and tools provided with the API.

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DGIF Beta Web Map
Thank you

Questions?

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