Bringing it all Together
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Introductions

Todd P Payne
Content Area

Keep all text and graphics within this area, except for single full-screen images.

(.75” margin all around)

Right-click and select Grid and Guides
Check "Display drawing guides on screen"

Projector Color Guidelines

Use the sRGB video mode on the projector.
Most projectors have this setting.
Our Problem at the Engineering Counter

- Data overload.
- Drawings, images, printed forms, files, databases.
- Finding the information needed required expert knowledge of multiple systems and applications.

How can we find the information fast?
The search for information almost always started with the map…

• We Would:
  - Open the paper Map Book
  - Find some key piece of data like:
    - Parcel ID
    - Account Number
    - Sub Division or Project Name
    - Log book entry
  - Use other applications to get the information we were interested in.
  - The map book was our launching point we just needed to add a way to access the information from the map.
A web based approach

- Uses ArcGIS Server to expose map services
- Uses the JavaScript API to develop applications that run in the browser
- Uses Web Services and links to add additional information from other systems

The map becomes the gateway or portal for information discovery. The web platform allows us to access the application from any workstation with a browser and have not have to deal with multiple installs and version.
A web based approach

Web Map In Browser
- Dojo
- JavaScript API
- Data API

Web Server
- Data Services
- ArcGIS Server
- Web Map
- Report Server

SQL Server Databases
- Accounting
- Engineering
- Geodatabase
Sequence of Events

- Browser Requests Application
- Server Responds with the Application
- Application Loads and Requests Maps from ArcGIS Server.
- ArcGIS Server Responds with Map tiles and
- User Clicks on the Map Over a Feature of Interest.
- Query Sent to ArcGIS Server to obtain Feature Data.
- ArcGIS Server Responds With Features and graphics are added to the map.
Sequence of Events  Continued (mash up data from web services)

- Browser Requests additional data from Web Server
- Web Service Responds with data in JSON
- Feature and Web Service Data is Loaded into a Pop Up Window for display
- User Clicks on graphic added to the map display
- Browser Displays the Pop Up Window
- Pop up window displays information, hyperlinks to other related web pages, scanned pdfs, and reports.
Server Technologies Used

- Microsoft SQL Server (Database Repository)
- Microsoft Server 2008 with IIS (Web Services)
- Active Directory (Authentication / Authorization)
- ESRI ArcGIS Server, Desktop (GIS Capabilities)

Application Development Technologies

- Microsoft Visual Studio (Development environment)
- ASP.NET, ADO.NET, HTML, JavaScript, CSS (components of web sites and services)
- JavaScript API and DOJO Framework (client side browser code for dynamic user experience and GIS functionality)
Questions?

Todd P Payne
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