NASA World Wind

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World Wind Is

- Open-Source Virtual Globe
- Library to Use in Applications and Web Pages
- An Application Component
  - Not an App in Itself
- Cross-Platform
- Java, JavaScript/HTML5
World Wind Provides

- Geographic Context for Data and Information Visualization
- Rich Set of Shapes and Graphics Primitives
- Data Import From Local, Web, Cloud, Database, OSM,…
- Viewing, Picking, Scene Control
- Platform Independence
App Component

- Element in Web Page or App
- Component of App
- Place Anywhere
- Multiple Locations
- Single Library
- Virtual Globe API with Terrain
Analysis Applications
Multi-Window
World Wind Users

- DOE
- DOD
- FAA
- Homeland Security

- Commercial
- Research
- Space
Features

- 3D Virtual Globe
- 2D Map with Projection Choices
- Imagery & Elevation Import
- Picking
- Extensible
- Data Retrieval via REST, WMS, WCS, WFS, Bing, User Defined
- Placenames
- KML Import
- Shapefile Import
- Decluttering
- Measurement
- Line of Sight
- Subsurface Visualization
Sub-Surface Soon
Data Sources

- OGC Web Services
- Database Services
- File System
- Proprietary Services
- User Entry
Platforms

- Windows
- OS X
- Linux
- iOS
- Android OS

- Desktop
- Laptop
- Android
- iPad
- iPhone

- Internet Explorer
- Firefox
- Chrome
- Safari
Other Tools

- Google Earth
- OpenLayers
- Cesium
- Google Maps API
- Layerscape

- Unity Game Engine
- NOAA NeoViz
- ESRI Products
- Earth Vision
- GPlates
World Wind Summary

• Geographic Context for Information Visualization
• Component with API Rather than an App
• Quickly Learned and Incorporated
• Extensible so you can add your own functionality
• Open Source, Free and Unencumbered
Questions?

Thank You!
Shapes

- Placemark
- Path
- Polygon
- Extruded Polygon
Surface Shapes
Shapes

- Geographic Text
- Balloon
- Analytic Surface
Airspaces
Mil-Std 2525

Tactical Symbols

Tactical Graphics
Bing Maps

Aerial
Aerial + Roads
Roads
Deployment Options
Architecture

World Wind Provides the Geographic Context
<!DOCTYPE html>
<html>
<head lang="en">
  <meta charset="UTF-8">
  <title>World Wind Example</title>
  <script src="../worldwindlib.js" type="text/javascript"></script>
</head>
<body>
<div style="position: absolute; top: 50px; left: 50px;">
  <canvas id="canvasOne" width="1024" height="768">
  </canvas>
</div>
<script>
  window.addEventListener("load", eventWindowLoaded, false);

  function eventWindowLoaded() {

    var wwd = new WorldWind.WorldWindow("canvasOne");

    wwd.addLayer(new WorldWind.BingAerialWithLabelsLayer());
    wwd.addLayer(new WorldWind.CompassLayer());
    wwd.addLayer(new WorldWind.ViewControlsLayer(wwd));
    wwd.redraw();
  }
</script>
</body>
</html>
Examples

- Basic Example
  http://worldwindserver.net/webworldwind/examples/BasicExample.html

- Bing Layers
  http://worldwindserver.net/webworldwind/examples/BingLayers.html

- Placemarks and Picking
  http://worldwindserver.net/webworldwind/examples/PlacemarksAndPicking.html

- Pick All Shapes in Region
  http://worldwindserver.net/webworldwind/examples/PickAllShapesInRegion.html

- Paths
  http://worldwindserver.net/webworldwind/examples/Paths.html

- Surface Shapes
  http://worldwindserver.net/webworldwind/examples/SurfaceShapes.html

- Multi-Window
  http://worldwindserver.net/webworldwind/examples/MultiWindow.html

- Geographic Text
  http://worldwindserver.net/webworldwind/examples/GeographicText.html

- Surface Image
  http://worldwindserver.net/webworldwind/examples/SurfaceImage.html

- Screen Image
  http://worldwindserver.net/webworldwind/examples/ScreenImage.html
Sensor Command & Control

5/5/15

Special Technologies Laboratory – Unclassified
Price List

- **World Wind Client**
  - Single-user license $0
  - 2 – 200 Users $0
  - Enterprise (over 200 users) $0
  - Source Code $0
  - Support (email & forum) $0

- **World Wind Server**
  - WMS Server, unlimited license & source code $0
  - Primary Imagery (Blue Marble, I3, NAIP, etc.) $0
  - Merged Elevations (NED 10, SRTM, Aster) $0