



Eclipse Enterprise GIS

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Agenda

- History
- Business Requirements
- Eclipse Maps
 - Eclipse Maps Website
 - Eclipse Map Viewer
 - Eclipse Map Apps
- Eclipse GeoPortal
- Architecture Overview
- Demo
- Q&A

History

Create a one-stop gis website where users can find maps, spatial data and other gis related resources.

User can collaborate by posting blogs or post questions or comments via discussion forums.

Easy to customize (code available) and full control over deployment, versioning, entitlement, Windows AD authentication.

Support for web based ArcGIS server web maps.

GeoPortal v1.0 Original Requirements

- One place for maps and data distribution
- Easy to find through search or browsing.
- Region centric hierarchy
 - Region
 - Maps
 - Map formats (Arc, Google, PDF)
 - Data
 - Categories (Cultural, Geological, etc.)
- Collaboration Tools
 - Blogs
 - Forums
 - Helpdesk
- Web based maps

GeoPortal v1.0 - DNN

- GeoPortal Website Using DotNetNuke 4.0
- Modules used:
 - Documents Module
 - Discussion Forums
 - Blogs
 - Text/Html Module
 - Links Module
- Own sub-domain: <http://gis.apachecorp.com>
- Web Maps using Web ADF – Web Mapping Applications

GeoPortal v1.0 (DNN)

The image displays a composite view of the Apache GeoPortal v1.0 (DNN) website. The main interface is a web browser window showing the homepage with a navigation menu (Home, Argentina, Australia, Canada, Egypt, North Sea, Central, Previous, Gulf Coast) and a large banner reading "Welcome to Apache GeoPortal!". Below the banner, there are sections for "About Us", "Services", and "Recommended". A central map of Argentina is shown with a network of blue lines and red dots, overlaid with the text "ArcGIS Server" in large red letters. The map is displayed in a browser window with a sidebar containing a tree view of data layers. In the background, another browser window shows the "Argentina Region" page, which includes a search bar, a "Welcome to Argentina Page" message, and a "GIS Application Support" section with contact information for Sergio Gilera and Daniel J. Carrasco. The overall layout is clean and professional, typical of a corporate web application.

Map Viewer New Requirements

- **Lesson Learned**

- Web ADF maps are slow
- Prior to 9.3.1 ADF Runtime licensing was required (full cost)
- Upgrades always painful (tools and web maps migration)
- Integration with other web apps is cumbersome
- User interface is strict (tools, tasks, etc.)

- **New Web Map Viewer Requirements**

- Fast, simple and intuitive web based map viewer targeting non GIS users
- Easy to deploy to users internally (no installation required).
- Easy integration with existing MS-Sharepoint team sites and other in-house web applications
- Extensible to support different department workflows
- Easy to share maps with other users

Eclipse Enterprise GIS

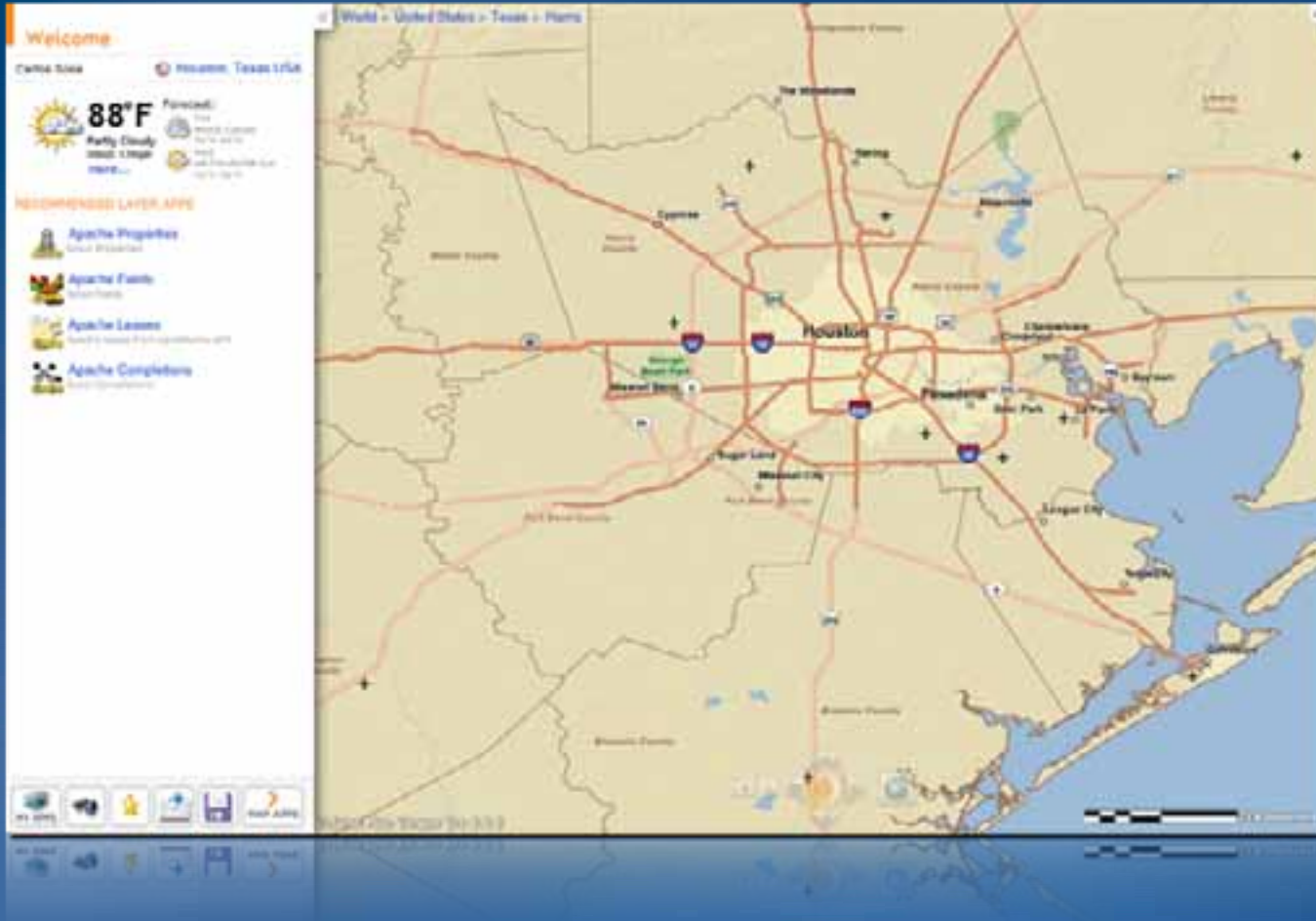
ECLIPSE MAPS



Why Silverlight?

- Web ADF is object rich but slow and complex and requires licensing to deploy*
- Javascript API is light, free but challenging to deploy because browser compatibility issues
- Flex API is light, free and stable technology but need to learn a new language platform
- Silverlight API is light, free and uses .NET language
 - Challenges
 - Silverlight plug-in was not part of corporate image
 - Silverlight does not support native html rendering
 - Not enough tools built yet (legend, printing, etc.)

Eclipse Map Viewer



Map Features

- Navigation links
- Overview Map
- Version Label
- Navigation Control
 - Navigation Rose
 - Zoom In/Out Buttons
 - Use Mouse scroll wheel
- Base Map Settings
 - Base Map
 - Base Layers
- Scalebar

Map Tools

Welcome



Find Tool



Bookmarks



Share Map



Save Map



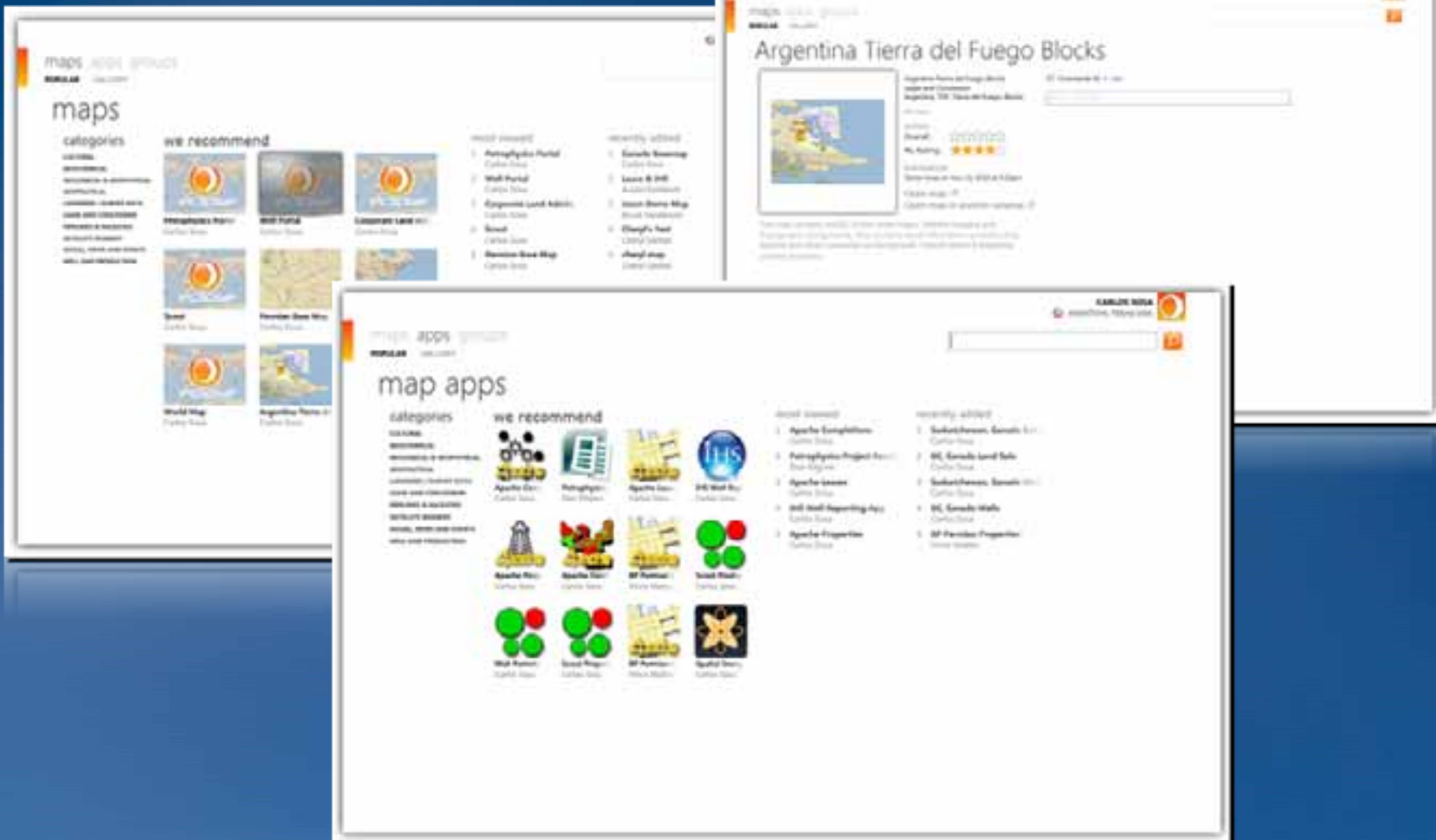
Eclipse Map Apps

- Add functionality and data to eclipse maps (encapsulated)
- Customizable to department workflows
- Reads data into variety of formats
- Available map apps:
 - ArcGIS Services Map Services
 - Eclipse Markers
 - Eclipse GeoTag Pictures
 - Dynamic Bubble Maps
 - GeoRss feeds
 - Satellite Imagery Browser
 - IHS Reporting Tool



Eclipse Maps Website

<http://maps.apachecorp.com>



Eclipse – iPhone Analogy



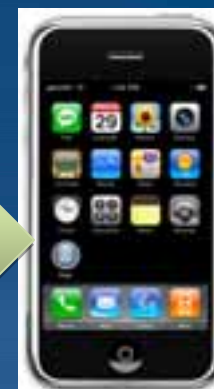
iTunes

Distribution of content such as music, podcasts, apps, e-books, etc.



iPhone Apps

Applications for iPhones and other devices.



iPhone

Device where applications are installed



Eclipse Maps Website

Distribution of content; maps and map apps.



Eclipse Map Apps

Map Apps for Eclipse Map Viewer.



Eclipse Map Viewer

Device (Browser/Map Viewer) where map apps are installed.

Eclipse Integration – Embedding Map Viewer

```
<object data="data:application/x-silverlight-2," type="application/x-silverlight-2" id="silverlightControl"
width="920" height="400">
  <param name="source" value="http://maps.apachecorp.com/WorldMapView/ClientBin/WorldMapView.xap"/>
  <param name="minRuntimeVersion" value="3.0.40307.0" />
  <param name="autoUpgrade" value="true" />
  <param name="initParams" value="config=0397d6df-0131-4e5a-aaa7-abc9dd73a31e"/>
</object>
```

Scout Application



Petrophysics Portal



Well Portal

Eclipse Enterprise GIS

ECLIPSE GEOPORTAL



GeoPortal New Requirements

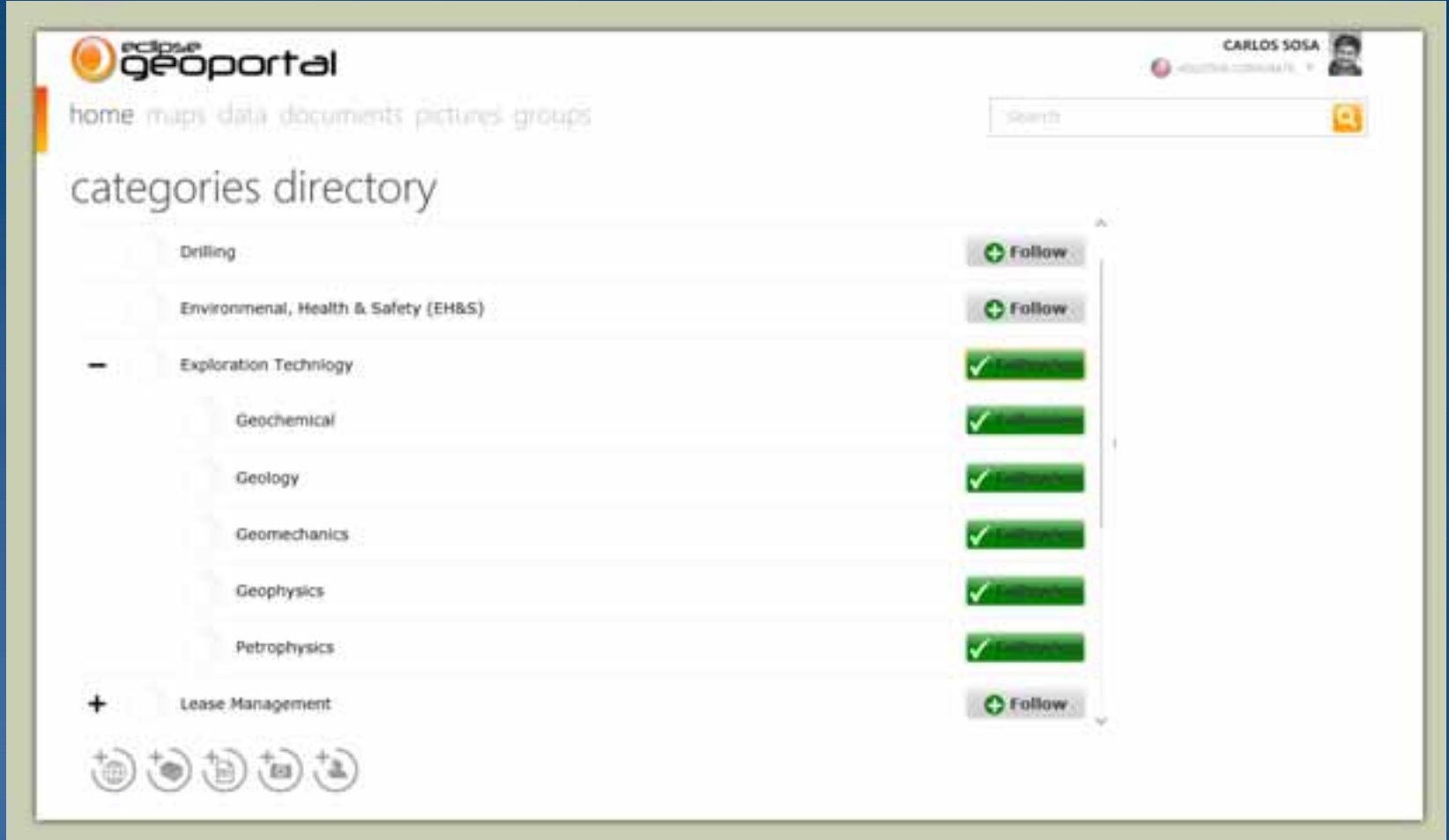
- **Existing GeoPortal Limitations (DNN)**
 - Publishing and search capabilities are marginal
 - No support for metadata or geotags reading
 - Multiple document publishing is cumbersome
 - Content must be organized hierarchically (pages, modules)
 - User Views/Hits reporting is based on pages
- **Lessons Learned**
 - Regions are changing rapidly
 - Regional pages are often confused with geographic location of resources.
 - Users don't use collaboration tools (blogs, forums)
 - Most users know location and content type
 - Users are adopting social media type of features
 - User want to show their content in a map

Home Page

The screenshot displays the Eclipse Geoportal home page with several key features highlighted:

- User Profile:** Located in the top right corner, showing the name CARLOS SOSA and a profile picture.
- Content Type:** A navigation menu at the top left containing links for home, maps, data, documents, pictures, and groups.
- Categories:** A sidebar on the left titled "FOLLOWING 10 CATEGORIES" listing various geological and geophysical topics such as Exploration Technology, Geochemical, and Production.
- News feed:** A central section titled "NEWS FEED" with icons for Map, Data, Document, and Picture.
- Location:** A world map on the right side with a red location pin over North America.
- Publish Tools:** A row of five icons at the bottom left representing different publishing or sharing tools.

Categories Directory



Twitter style subscription allows users to “follow” specific categories of interest to get news feed of all content updates and social media elements (comments, likes, rates, etc.).

Pictures – Albums View

The screenshot displays the Eclipse Geoportal interface. At the top left is the logo for Eclipse Geoportal. The navigation menu includes 'home', 'maps', 'data', 'documents', 'pictures', and 'groups'. The 'pictures' section is active, showing a list of albums on the left and a map view on the right.

Navigation: home | maps | data | documents | pictures | groups

Albums: ALBUMS | VIDEOS | MY PICTURES

Categories:

- EXPLORATION TECHNOLOGY
 - GEOCHEMICAL
 - GEOLOGY
 - GEOMECHANICS
 - GEOPHYSICS
 - PETROPHYSICS
- NEWS AND EVENTS
- PRODUCTION
 - WELL AND PRODUCTION
 - SATELLITE IMAGERY

Albums:

- Field Pictures from W
- Green American Road
- Egypt Pictures
- Social Album
- 2010 Europe Vacation

Map View: A satellite map showing a road network with several location markers (orange pins) and a search bar.

User Profile: CARLOS SOSA (Avatar)

Footer: A row of five circular icons representing different portal features.

Pictures – Items View

eclipse geoportal

home maps data documents pictures groups

ALBUMS VIDEOS MY PICTURES

Search

CARLOS SOSA

Field Pictures from Wieser

7 PICTURES

RIMG0004 APACHECORP/Carlos.	RIMG0006 APACHECORP/Carlos.	RIMG0007 APACHECORP/Carlos.	RIMG0008 APACHECORP/Carlos.	RIMG0007 APACHECORP/Carlos.
RIMG0009 APACHECORP/Carlos.	RIMG0028 APACHECORP/Carlos.			

Map view showing location pins on a satellite map.

Navigation icons: Home, Refresh, Print, Email, Share

Documents – Collection View

eclipse geoportal

Home maps data documents pictures groups

BROWSE MY DOCUMENTS

Search

Petrophysics Project Results

- Anadarko Basin
Carlos Sosa
- Selected North Ameri
Carlos Sosa
- Africa
Carlos Sosa
- Onshore Natural Gas
Carlos Sosa
- Austral Basin - Chile
Carlos Sosa

Documents – Item Details

Apache Geoportal
home maps data documents pictures groups

BROWSE MY DOCUMENTS

Selected North American Onshore Natural Gas Play 20090612

PDF Adobe

Selected North American Onshore Natural Gas Play 20090612

Tags: Gas Play, North America

CREATED BY: Carlos Sosa on Apr 18 at 10:30pm

Location: Apache Off Central Res.

CONTENT: Selected North American Onshore Natural Gas Play 20090612

Like

Comments (1) Comment

Carlos Sosa
This is a comment from a user on Apr 18 at 10:34pm

Map showing the location of the document in the Apache Off Central Res. area.

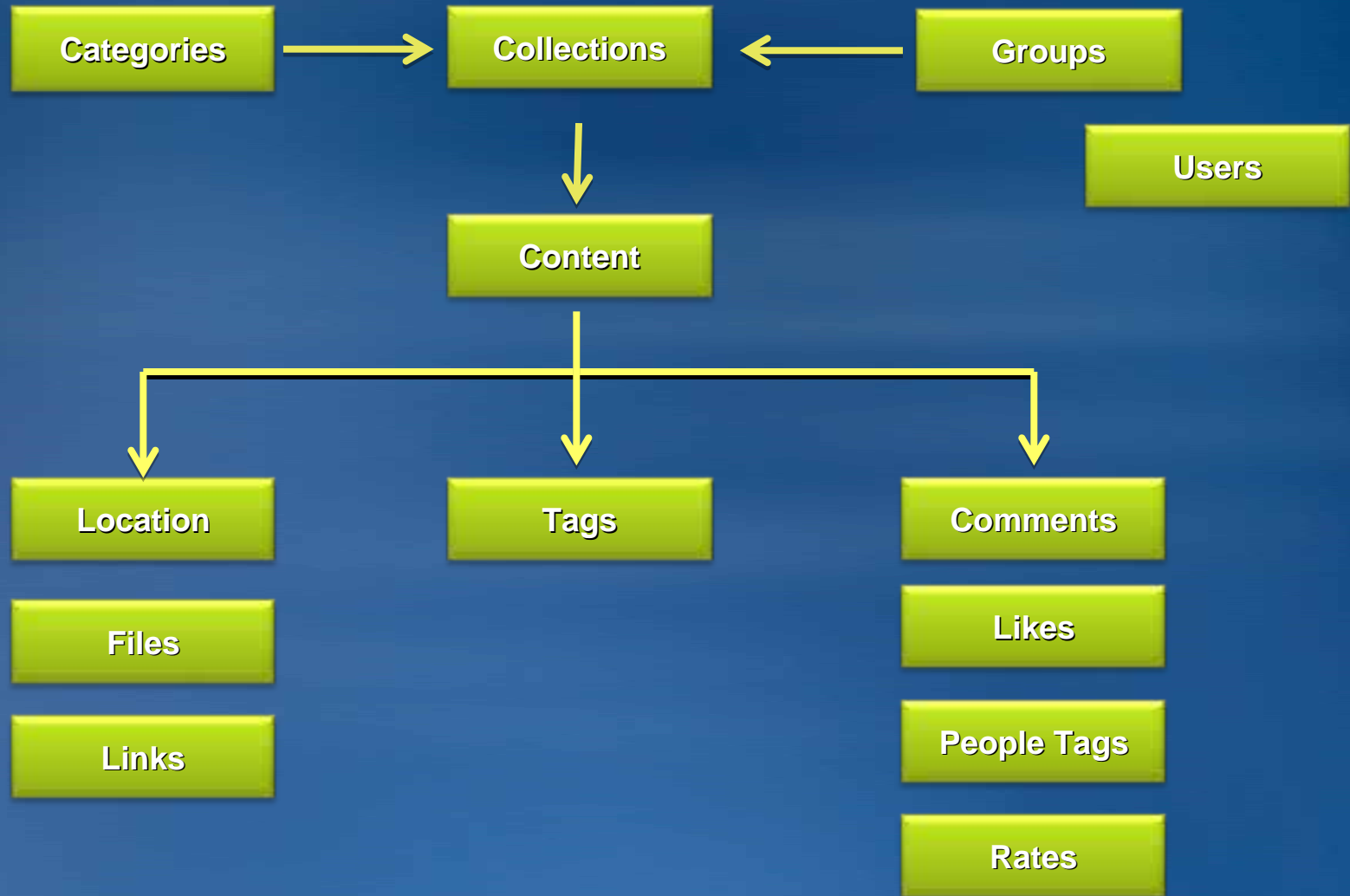
Search

CARLOS SOSA

Location icons: Home, Location

Share icons: +, +, +, +, +

Architecture Overview



GeoPortal Features

- **Categories supports sub-categories**
- **Collections supports one type of content and relates to one category only**
- **Supported Content Sources**
 - Files on My Computer (Uploading)
 - Files and folders in network (Sharing)
 - Any content in Sharepoint Team Sites (Sharing)
- **Supported Content Type (Configurable)**
 - Maps: mxds, mxts, kml, kmz and pdfs
 - Data: lyrs, shapes, zip
 - Documents: Word, Excel, PowerPoint, PDFs, etc.
 - Pictures: JPG, PNGs, GeoTagged JPGs
 - Other: Sharepoint Announcements and links.

GeoPortal Features (Continued)

- **Geocoders**
 - **Bing Maps Geocoder**
 - Address location
 - **ESRI Geocoder**
 - Address location
 - **Lookup**
 - Predefined spatial queries (Basins, Fields, etc.)
 - **Metadata / GeoTags**
 - Parsing of XML Metadata and Extraction of geotag from files

Component Diagram



Demo

Q&A

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