Improved Communication with Portal for ArcGIS and AGOL at Liberty Utilities (Park Water and Apple Valley)

Liberty Utilities (Downey & Apple Valley)

Bell Gardens Web Map  CBMWD Ops Web Map  Liberty Locations  Liberty Utilities (Apple Valley) Web Map App

This Portal provides various GIS mapping views, tools, applications and dashboards for various levels of each water company.

Focus on Park Water and Apple Valley Systems
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- 2005 - No GIS @ AV and Park - Needs Assessment Conducted
- 2006 - AutoCAD Conversion - Data Model - GPS - ESRI Software Desktop
- 2007 - Conversion begins @ Park - Geometric Networks
- 2008 - ArcGIS Server - Web Maps - Field GIS - Conversion Begins at Apple Valley
- 2009 - Park GIS is Fully Functional Various Departments
- 2010 - Apple Valley Conversion Complete - ArcGIS Server - Field GIS deployed
- 2011 - Park-Apple Valley-Mountain Water go on ESRI's ELA
- 2012-13 - InfraMAP system for Field GIS is deployed
- 2014-15 - 10.1 Web Maps and AGOL get deployed - Yermo Water System Integration
- 2016-17 - 10.3.1 - Portal for GIS - Web Maps - Ops Dashboard – ArcGIS Pro (3D) – Desktop – Utility Network Beta
Apple Valley:
467 miles of main
17-PZ (22 PRVs)
27 – BPS
26 – Storage Fac.
43 – Prod. Wells
27K – Service Connections

Park Water
257 miles of main
6-Interconnections
3 – BPS
3 – Storage Fac.
12 – Production Wells
27K Service Connections

Yermo Water
7 miles of main
3 – Production Wells
323 – Services
Two Contract Systems: Central Basin Municipal Water District and City of Bell Gardens (North System)
Needs and Configurations
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Issues:

- Prior to Portal and AGOL – Web Maps (Flex) stand alone or ArcIMS was available
- Flex Web Maps brought out new users requesting various queries
- Flex Web Maps where a bit “clunky”
- Outside Agencies (contracts) where asking us for data and or maps.
- Operation Supervisors asking to track activities and download data for reports.

Needs:

- A one stop location to manage/share data (web service)
- Leverage the tools in ArcGIS Server
- Some tools to configure website (Portal)
- Most of our data/web maps behind our firewall
- Easy customization
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When you add a server to your portal, this is federating the server with the portal. Only ArcGIS Server sites using version 10.2 or later can be federated with a portal. Federating an ArcGIS Server with portal integrates the security and sharing parameters of portal with the ArcGIS Server. When you federate a server, authorization to access the services delegates to the portal. You can have multiple ArcGIS Server Sites federated with the portal. All federated ArcGIS Server Sites are accessed using portal accounts, not ArcGIS server accounts.
Portal Items

- Integrate to IIS Web Adaptor
- Configure Active Directory Set up for Portal Member Log in
- Register Portal Windows Auth
- Register Software
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Portal Set Up and Publishing Maps
**Improved Communication with Portal for ArcGIS and AGOL at Liberty Utilities (Park Water and Apple Valley)**

### My Organization

**EDIT SETTINGS**  **ADD MEMBERS**  **VIEW STATUS**

#### Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Username</th>
<th>Last Login</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaron Gutierrez</td>
<td>portaladmin</td>
<td>Feb 24, 2016</td>
<td>Administrator</td>
</tr>
<tr>
<td>Aaron Gutierrez</td>
<td>agutierrez@PARKWATER</td>
<td>Jun 15, 2017</td>
<td>Administrator</td>
</tr>
<tr>
<td>Adam Ly</td>
<td>ally@PARKWATER</td>
<td>Apr 19, 2017</td>
<td>Publisher</td>
</tr>
<tr>
<td>Angel Quintero</td>
<td>aquintero@PARKWATER</td>
<td>Apr 6, 2017</td>
<td>Publisher</td>
</tr>
<tr>
<td>Diana Caja</td>
<td>dcsaja@PARKWATER</td>
<td>Jun 15, 2017</td>
<td>Administrator</td>
</tr>
<tr>
<td>Maria García</td>
<td>manag@BAWRWATER</td>
<td>Jun 1, 2017</td>
<td>Administrator</td>
</tr>
<tr>
<td>Rick Dalton</td>
<td>RdkO@PARKWATER</td>
<td>Apr 4, 2017</td>
<td>Publisher</td>
</tr>
<tr>
<td>System Publisher</td>
<td>system_publisher</td>
<td>Not yet</td>
<td>Publisher</td>
</tr>
<tr>
<td>Tammie Myers</td>
<td>Tammie@PARKWATER</td>
<td>Jan 25, 2017</td>
<td>User</td>
</tr>
</tbody>
</table>

**Total Membership**
- Current Count: 8
- Maximum Allowed: 15

- The most viewed items
- The last items added
- Groups
- The organization’s registered apps
- Featured Groups
- Featured Maps and Apps
- Liberty Utilities

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July 10–14–2017

Liberty Utilities
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Maps and Dashboards

GIS PORTAL Featured Content

Show
All
Maps
Layers
Scenes
Apps
Tools
Files
Liberty Utilities

Bell Gardens Web Map
CBMWD Ops Web Map
Liberty Locations

Liberty Utilities (Apple Valley) Web Map App
Liberty Utilities (Downey & Apple

Liberty Utilities (Park Water) - Meter Cycle &

Liberty Utilities (Park Water) Congressional
Liberty Utilities (Park Water) - System Web

Liberty(Park) Bell Gardens-CBMWD

Operations Dashboard for ArcGIS
PWC Service Area and Congressional

PWC Surrounding Water Companies
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Leaks by Year

- 2012: 60
- 2013: 34
- 2014: 42
- 2015: 30
- 2016: 8
- 2017: 3

Leaks Types by Year

Results for "All Leaks By Year"
Last executed: 6/16/2017 10:29:51 AM
Number of results: 177

Features:
- Show
- Zoom to
- Select

Park Water Leaks:
- Service Area
- Main Replaced?
- Pipe Material
- Pipe Manufacture
- Type
- Service Crew
- Pipe Install Year
- Pipe Diameter
- Staff
- Clamps
- Address
- Year
- Entered By
- Date Entered
- Comments
- Leak Date
- Time Started
- Time Ended
- Hours On Leak
- Est. Water Loss (Gal.)
- PAN
- Number of Services Affected

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A.G.O.L.

https://pwc.maps.arcgis.com/home/signin.html
Lessons Learned

- Web Mapping is fastest when you cache and have scale dependencies on layers
- Install Portal on separate server
- Discuss with staff what they want to see on Ops Dashboard
- Training

Pros

- Install and configuration was not as hard as I thought
- Useful tools with little or no programming
- Fast refresh rates even from different sites.

Cons

- Google Chrome vs I.E. browsers
- CSV File Downloads
- Hidden Tools – Need Esri Support

BOTTOM LINE: Portal and AGOL have decreased the request for individual maps or queries and has provided users in various departments and companies for better communication and collaboration.
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