



Esri International Developer Summit
Palm Springs, CA

Developer's Guide to ArcGIS REST APIs

Jeremy Bartley, Keyur Shah

Agenda

- **ArcGIS Platform Architecture – Role of REST**
- **Design and Concepts**
- **Demos**
- **Conclusion**

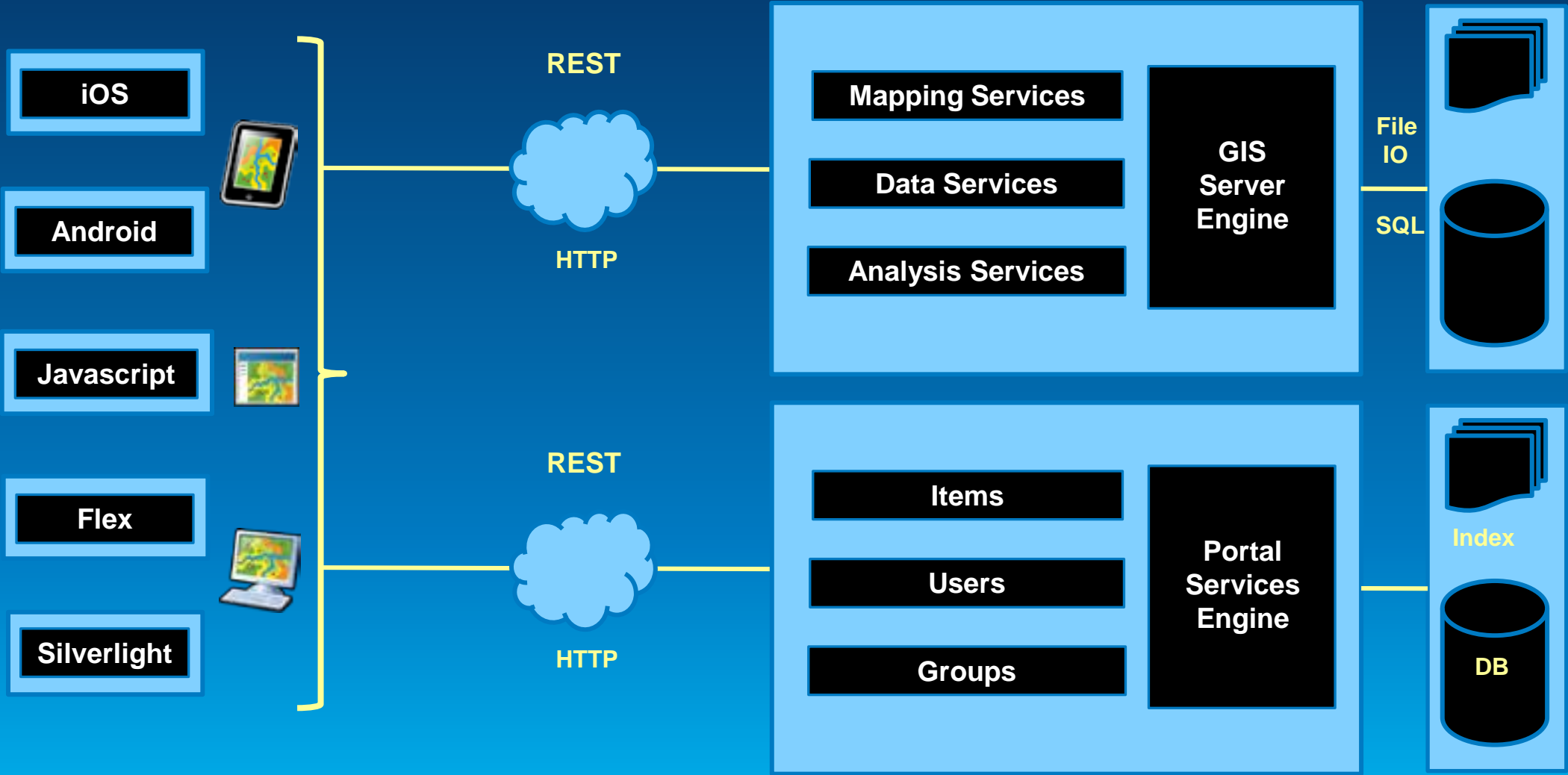
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The ArcGIS Platform – RESTful Architecture

ArcGIS Server

ArcGIS Portal



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REST – The Elevator Pitch

4 Key Principles*	
Identification Of Resources	Everything is a URL
Manipulation Of Resources Through Representations	Exchange standard formats using standard verbs
Self-Descriptive Messages	Every request asks the full question, every response includes the full answer
Hypermedia As The Engine Of Application State	Hyperlinks <code>Yeah!</code>

*Thank you: <http://www.intertwingly.net/blog/2198.html>

Everything is a URL

- **Hierarchy of resources**
 - Catalog, Services (Map, Geocode, etc.), Layers, Tasks, etc.
 - Community, Groups, Users
- **wget, curl... JavaScript, Ruby, Python, Perl... Java, .NET**
 - *interoperable*
- **Bookmark-able**
- **Browser is the new command line**

HTTP Goodness

- **HTTP as an *application* protocol**
 - **Cache-Control headers**
 - **ETags (Conditional GETs)**
 - **Compression (gzip)**
 - **Status codes**

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Conclusion

- **Open API accessible from a gamut of clients**
 - Continuously Evolves
 - Maintains compatibility
- **Adheres to HTTP standards**
- **Supported both On Premises and On Line**
 - Portal for ArcGIS + ArcGIS Server
 - ArcGIS Online – Organization Portal + Hosted Services

Post-Conclusion

3 points to remember...

- Everything is a URL**
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Understanding our world.