



Using ArcGIS for Server

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Summit Europe**

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1. Intro

2. ArcGIS for Server = **Geospatial Apps** Server

3. **Map** Services

- Publishing Flow

4. **Spatial Functionality** Services

- Publishing Flow

5. **Consuming** Services



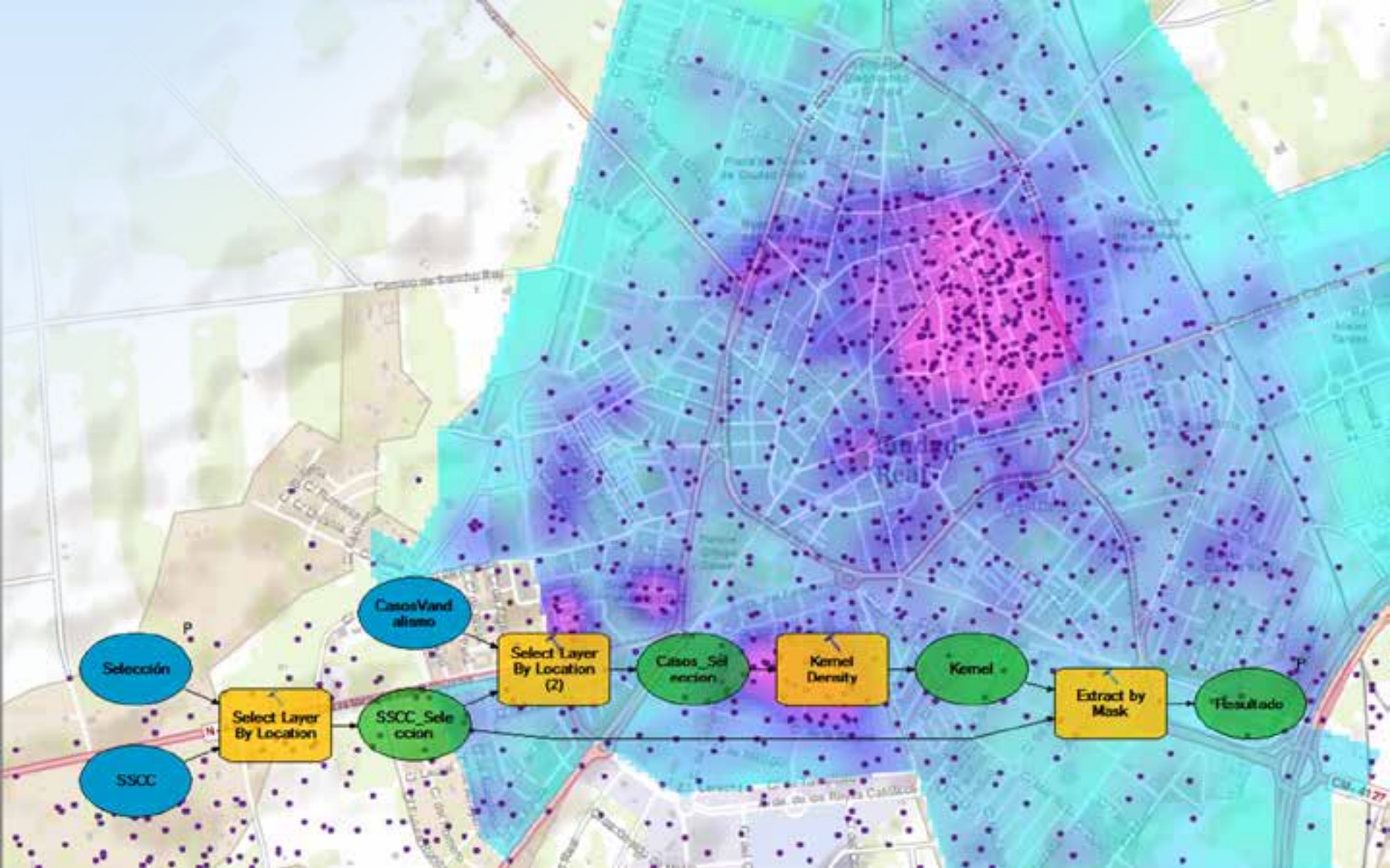
Agenda

What are we going to talk about?



Location is Important

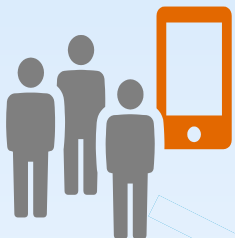
the power of where



Location is Difficult

projections, processing,
managing data...

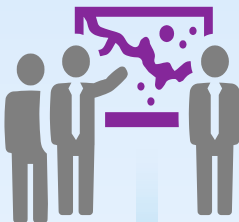
Knowledge
Workers



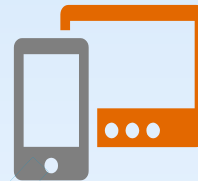
Decision-
Makers



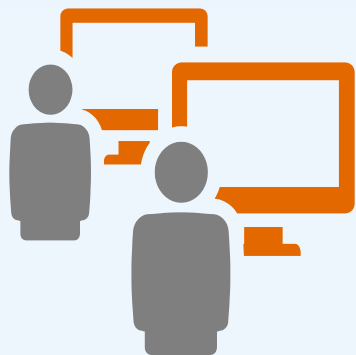
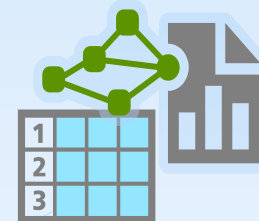
Public
Engagement



Anytime,
anywhere,
any device



Enterprise
Integration



GIS Professionals



ArcGIS

Web GIS

Opportunity

Our Job:
Turn complex into simple

...for your own organization
...integration into other applications



... for GIS community



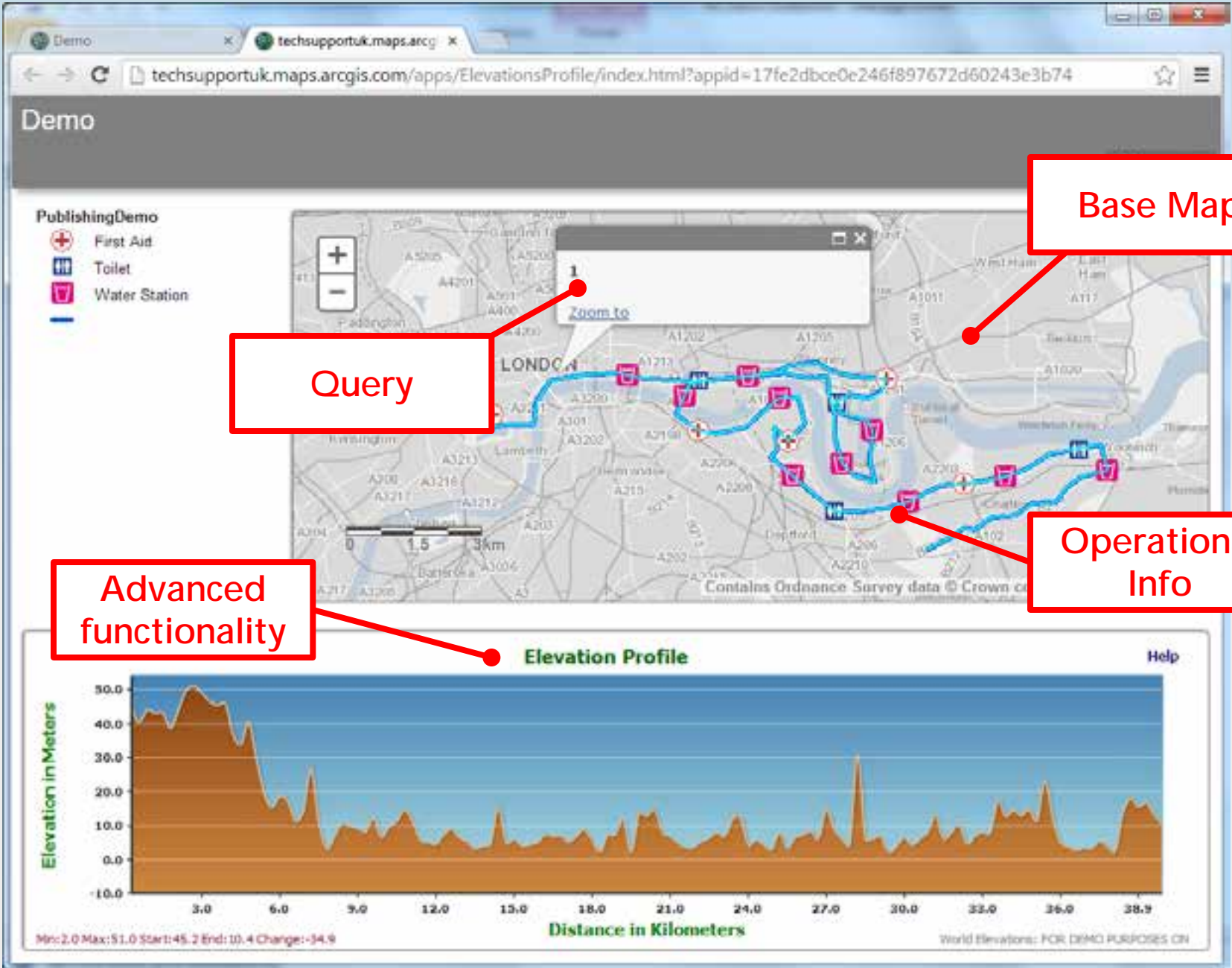
Come in we're
OPEN

...for everybody



Map Viewer vs WebGIS

WebGIS applications for...



FRONT END

Client-side SDKs and Apps



REST API

BACK END

ArcGIS Online

ArcGIS for Server

Client-side SDKs and Apps

FRONT END



GIS FOR END-USERS

REST API

REST

OGC

BACK END

ArcGIS Online

ArcGIS for Server

SERVICES

GIS Professionals

ArcGIS for Desktop

Editing

Analysis

Geodatabase

GIS PROFESSIONALS

DATA

ArcGIS for Server

The Geospatial Apps Server



ArcGIS for Server

Geospatial Applications Server

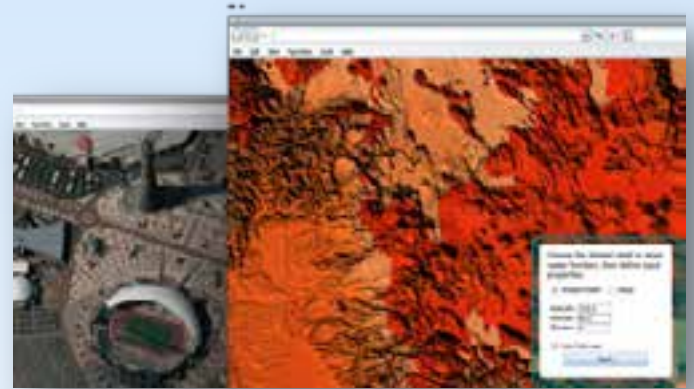
Map Geospatial **Applications** Server
Serving Maps

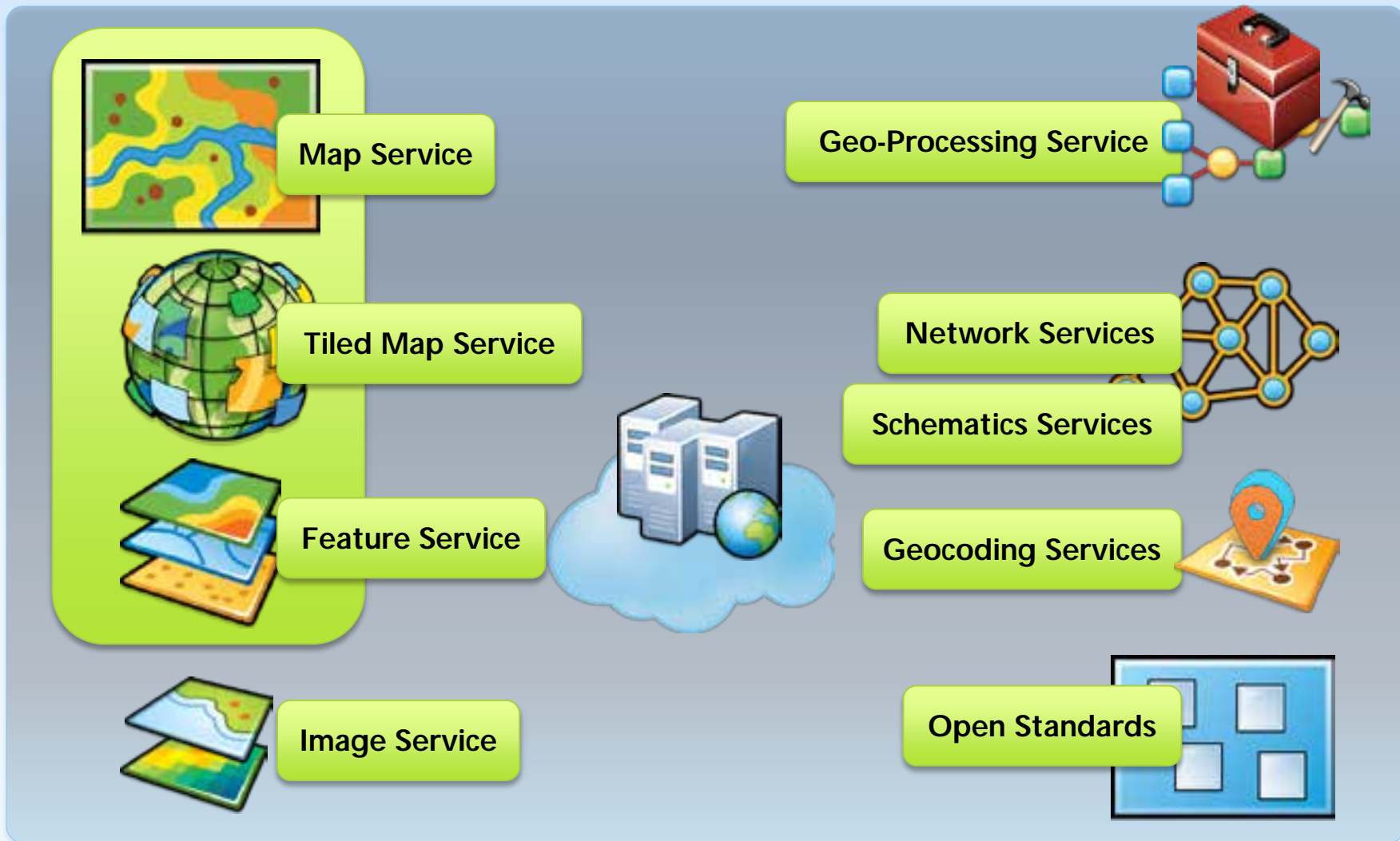
Supporting Applications

- Web, Mobile, Embedded
- Through REST
- Out-of-the-box Apps
- APIs and SDKs

Serving geospatial **functionality**

- Editing
- Spatial Analysis
- Routing
- Geocoding
- ...

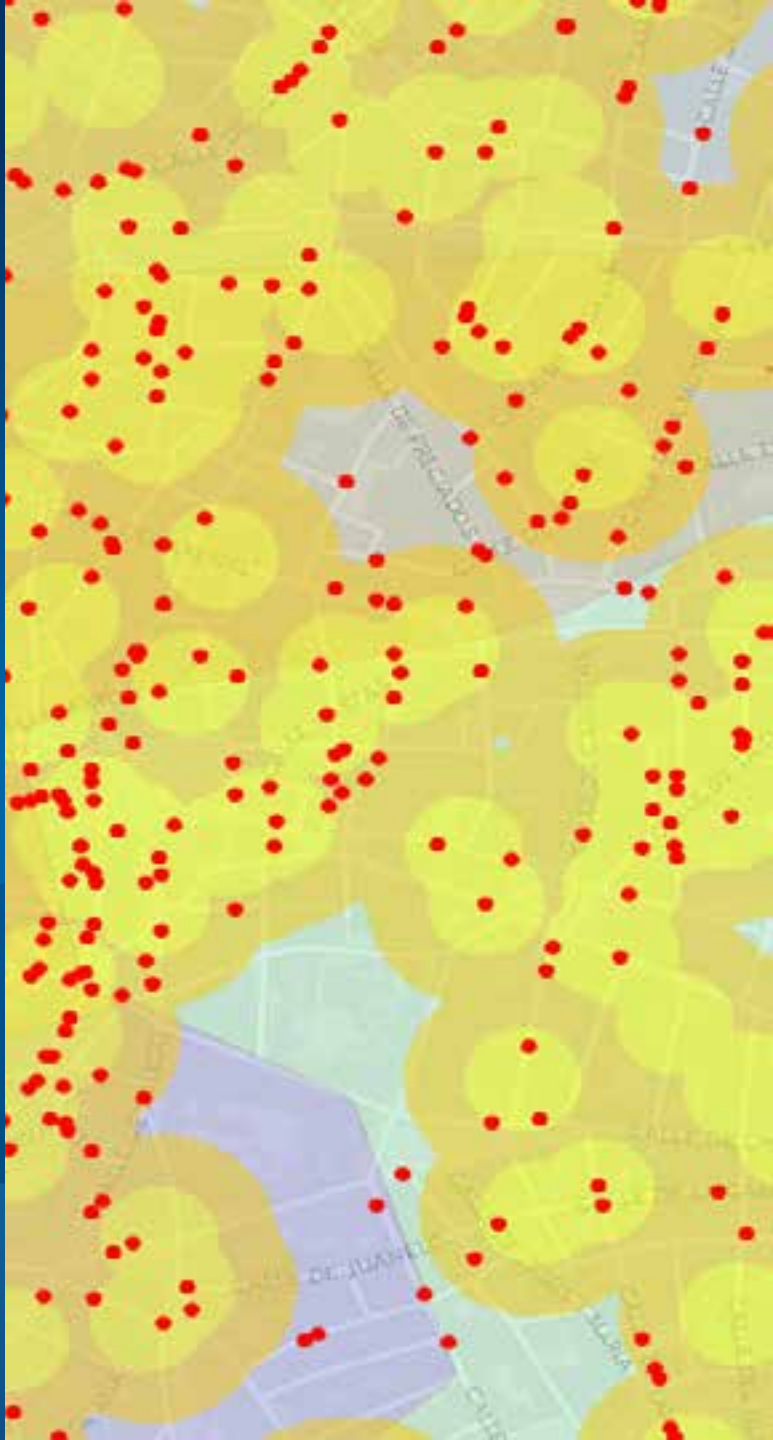




How? Geoservices

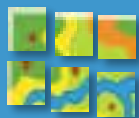
The power of GIS exposed through webservice

Map Services





Tiled Map Service



[Dynamic] Map Service



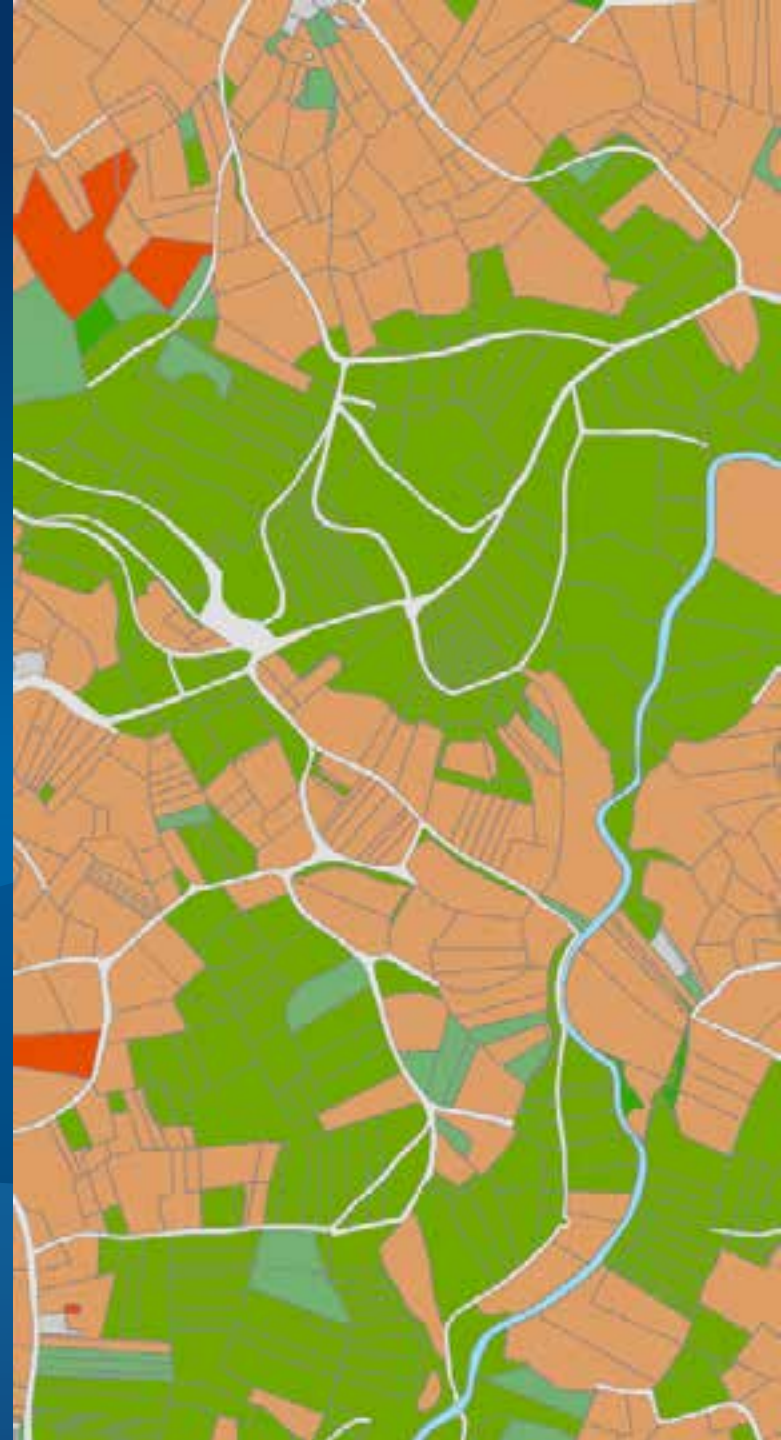
Feature Service



	Tiled Map Service	[Dynamic] Map Service	Feature Service
Query	YES	YES	YES
Edit	NO	NO	YES
Performance	Very Fast	Fast	Medium
Change symbology	NO	Dynamic Layers	YES
Config. Pop-up	YES	YES	YES
ArcGIS Server	YES	YES	YES
ArcGIS Online	YES	NO	YES
Recommended for	Base Info	Operational Info	Operational Info

DEMO

Map Service Types



DEMO

Publishing Map Services



Data Store Registration Copying data

Publishing Patterns



Data Store Registration Reference

Publishing Patterns

Publish

Server





Performance

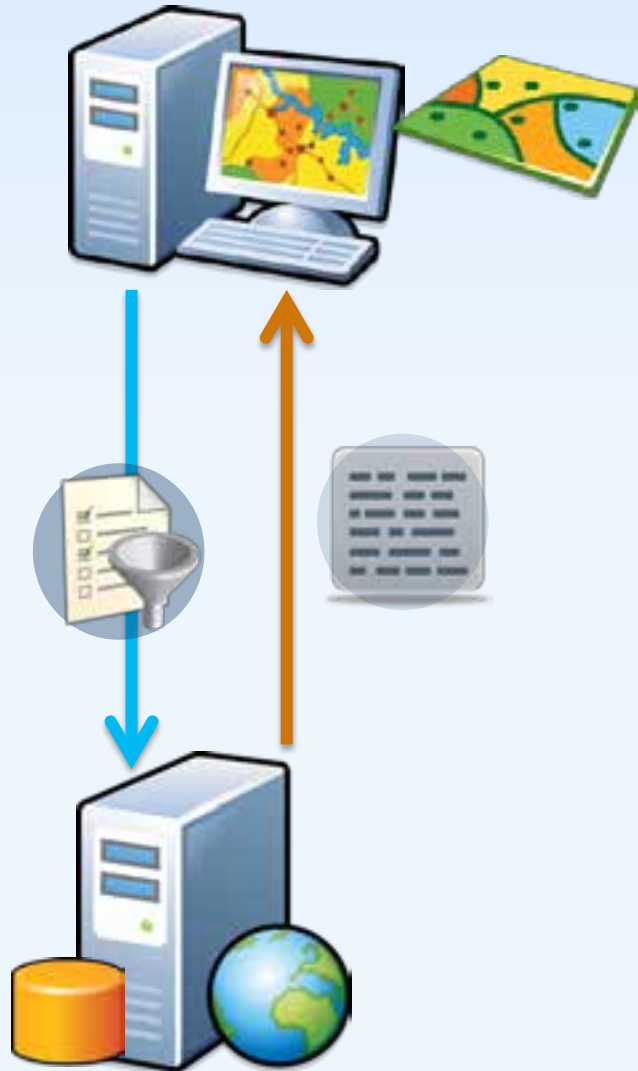
Dilemmas and Trade-Offs



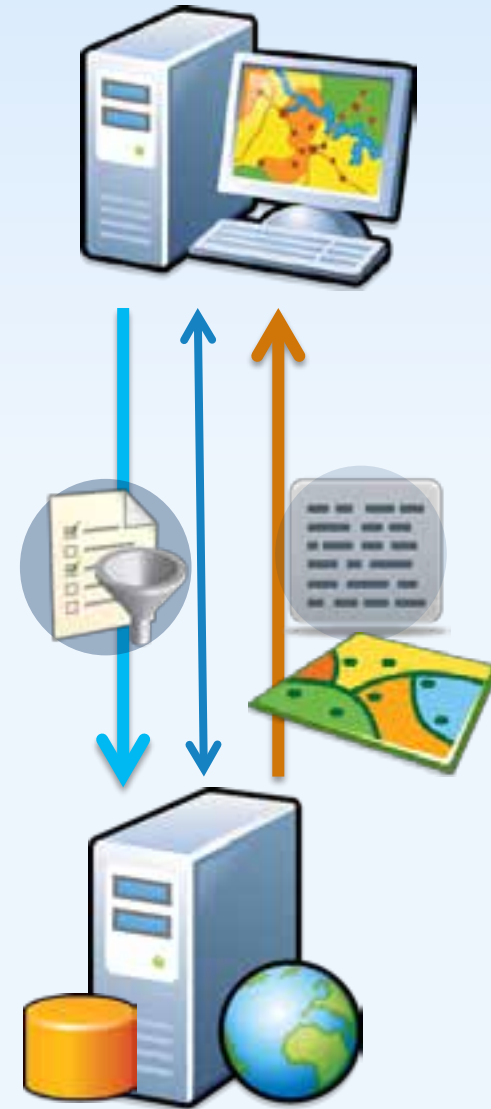
client-side or server-side rendering

ArcGIS for Server supports both

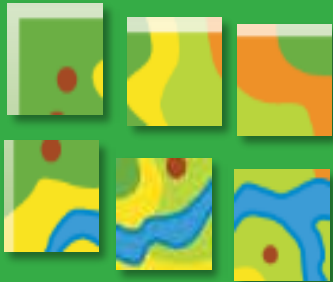
Client side graphics



Server side rendering



Tiled Services



Map Services



Map Services with Dynamic Layers enabled



Static Content
Static Appearance

Dynamic Content

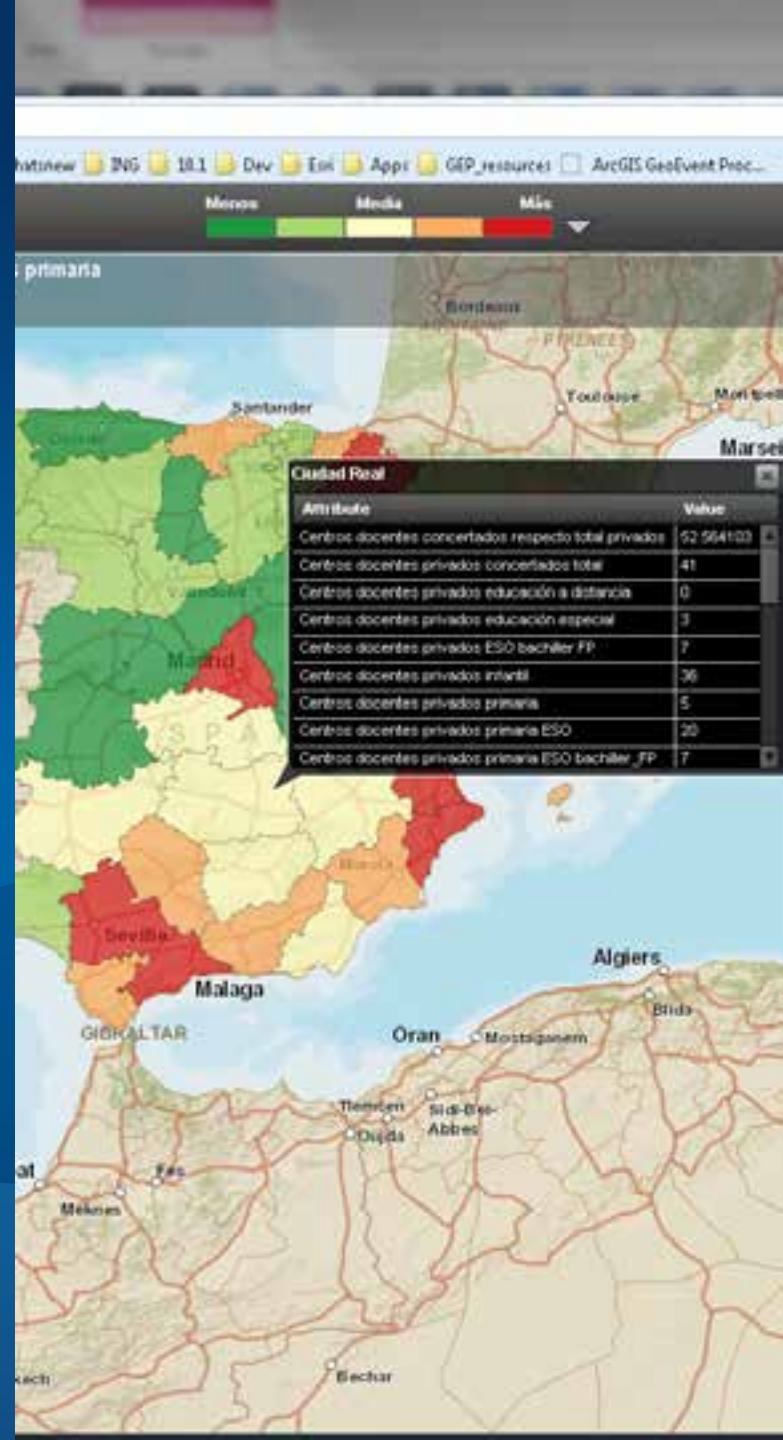
Dynamic Appearance

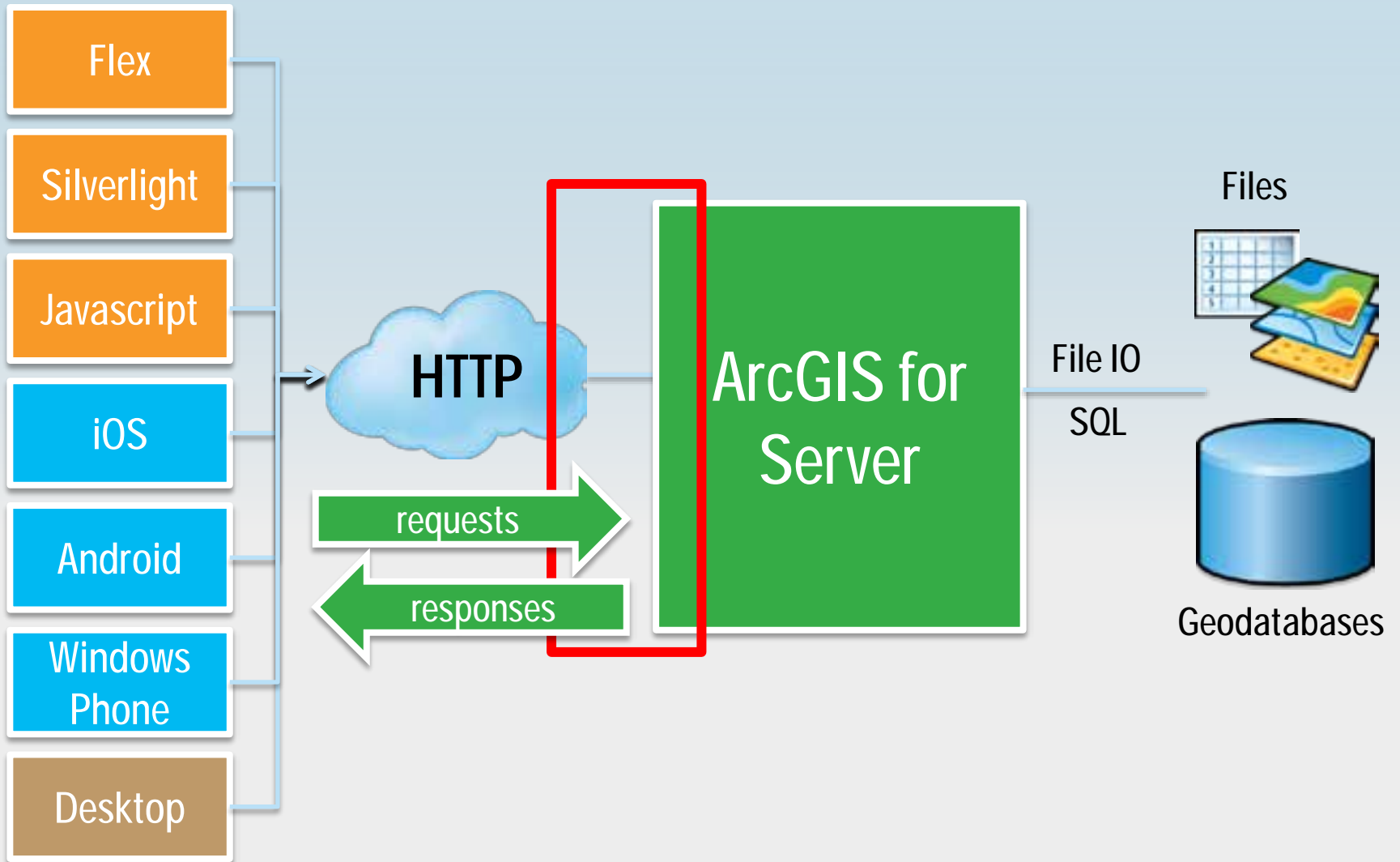
Server Side: Static vs Dynamic

content and appearance

DEMO

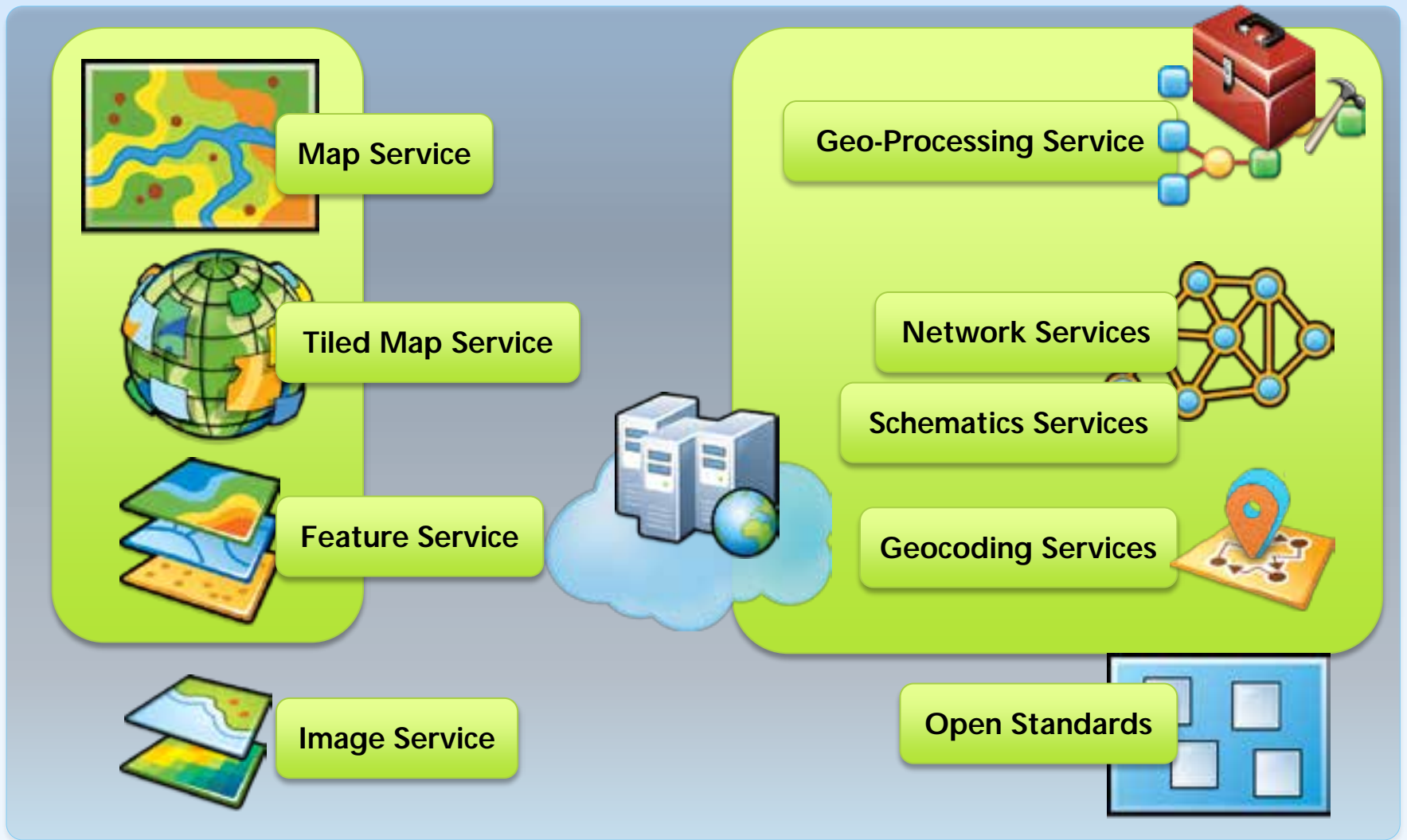
Dynamic Layers





REST API

Consuming map services



How? Geoservices

The power of GIS exposed through webservice

Spatial Functionality Services





**Complex
Information**

**Complex
Processing**

Simple Input

Actionable
[simple]
results

for users
and for developers

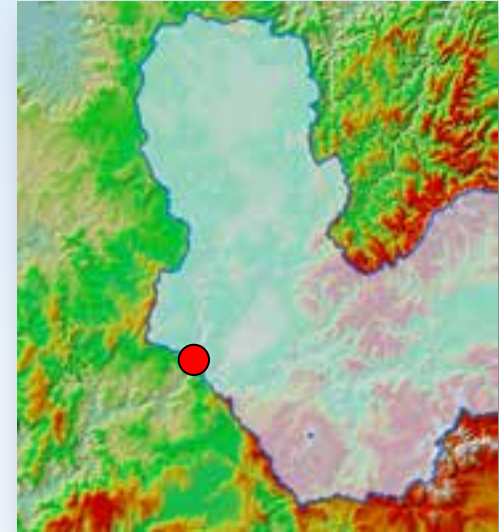
the Sweet Spot

Good geospatial services

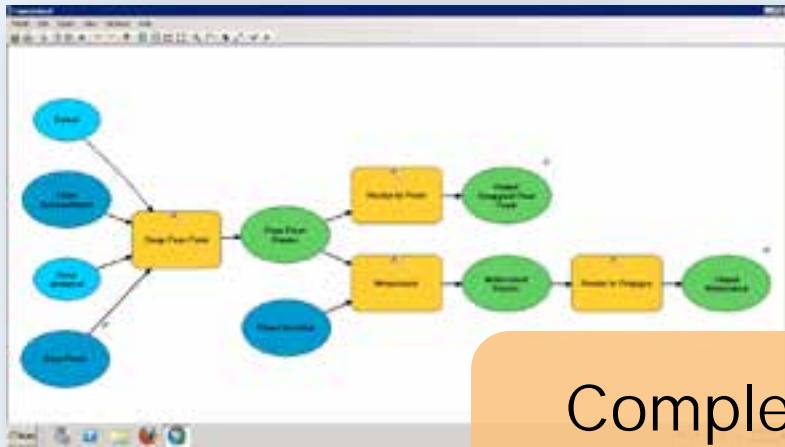


Complex
Information

Simple Input



Actionable
[simple] results



Complex
Processing

the Sweet Spot

Good geospatial services

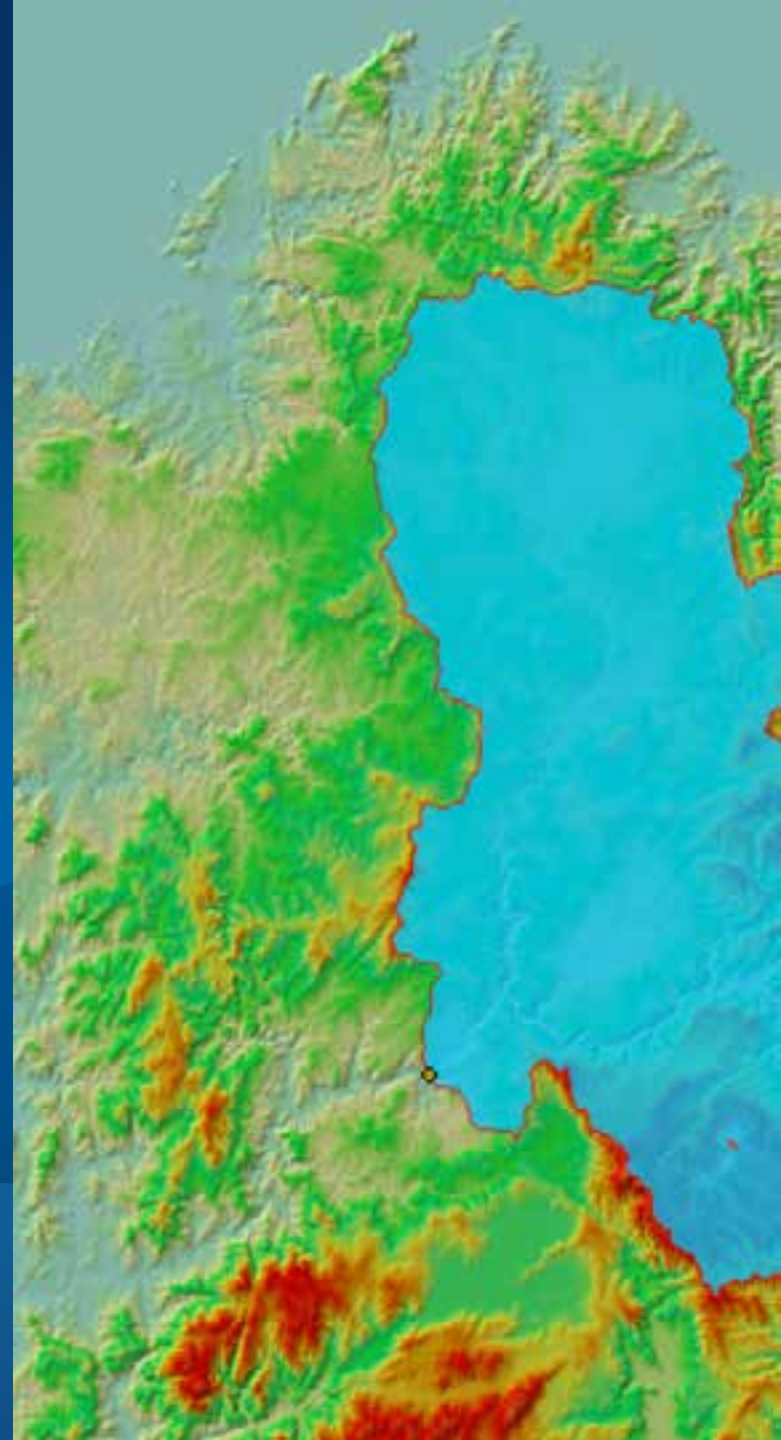
Types of services

	ArcGIS for Server	ArcGIS Online
• Geocoding	Custom	World Geocoding
• Routing	Custom	World Routing + Traffic
• Image	Yes	Base
• Print	Yes	No
• Geometry	Yes	Yes
• GP tools	Yes	No
• Geo-enrichment	No	Yes
• Spatial Analysis	Yes (GP)	Yes

DEMO

GP Service

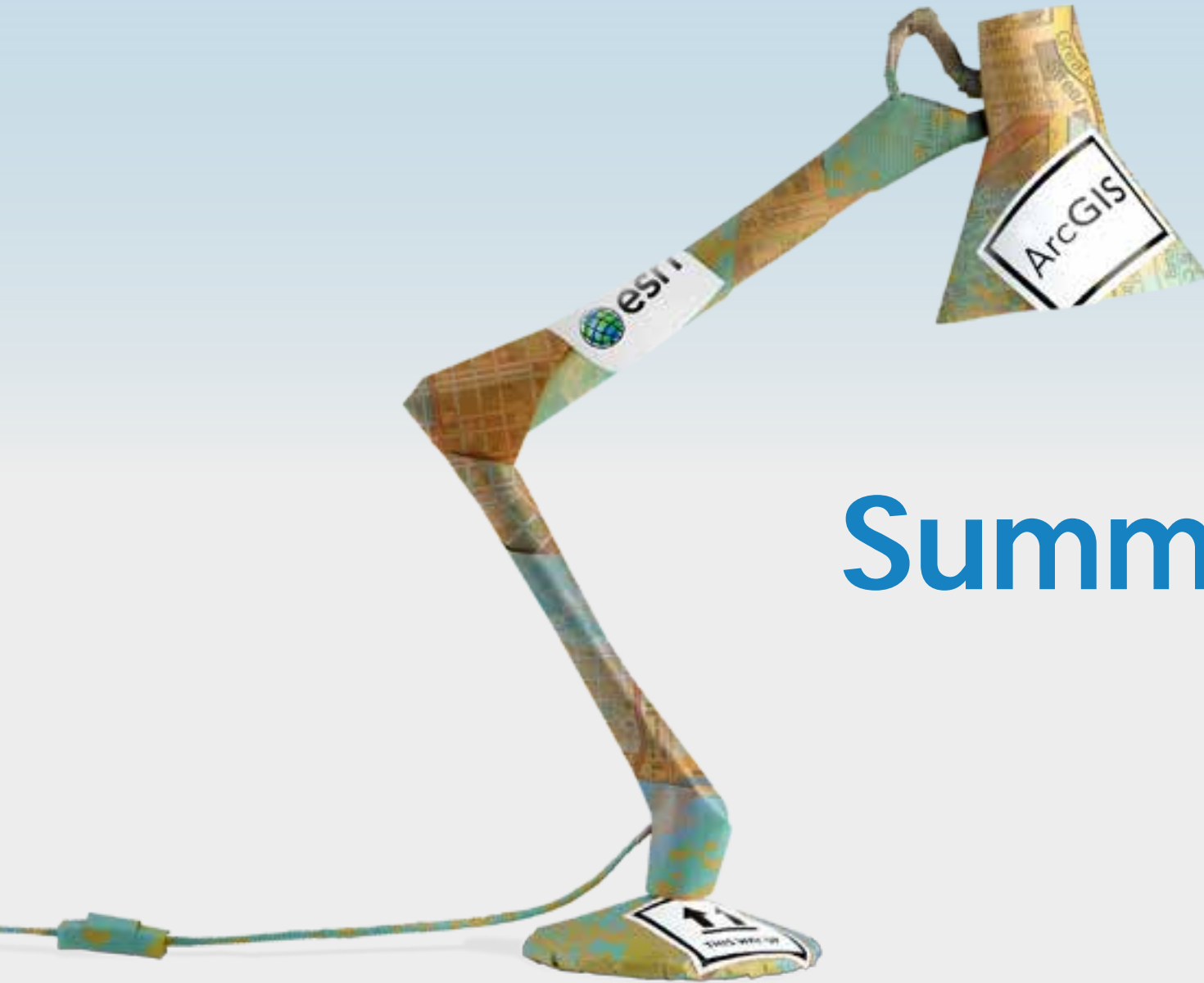
Watershed



How to access these services?

Using the one and only true language: REST

- REST API
- Services Directory
- SDK helper classes and methods
 - any platform



Summary

- Location is **important**, Location is **difficult**
- ArcGIS for Server **is not** a Map Server
- Good geospatial apps are
 - Interesting, **rich**, active, interactive
 - Use complex data, complex processing
 - Need simple inputs
 - Provide **actionable** and **simple** results
- ArcGIS for Server can serve
 - **Maps**, in many different flavours with different performance/functional trade-offs
 - **Functional** services
 - all of them through REST

Take-aways

How can developers leverage the power of ArcGIS for Server?

- [ArcGIS for Server - Map services](#)
- [ArcGIS for Server – GP services](#)
- [ArcGIS Online – Hosted Services](#)
- [ArcGIS Online – ESRI services](#)
- [REST API](#)
- [Fiddler Extension ArcGIS Server REST](#)

Learning more

developers.arcgis.com,
resources.arcgis.com



Understanding our world.