

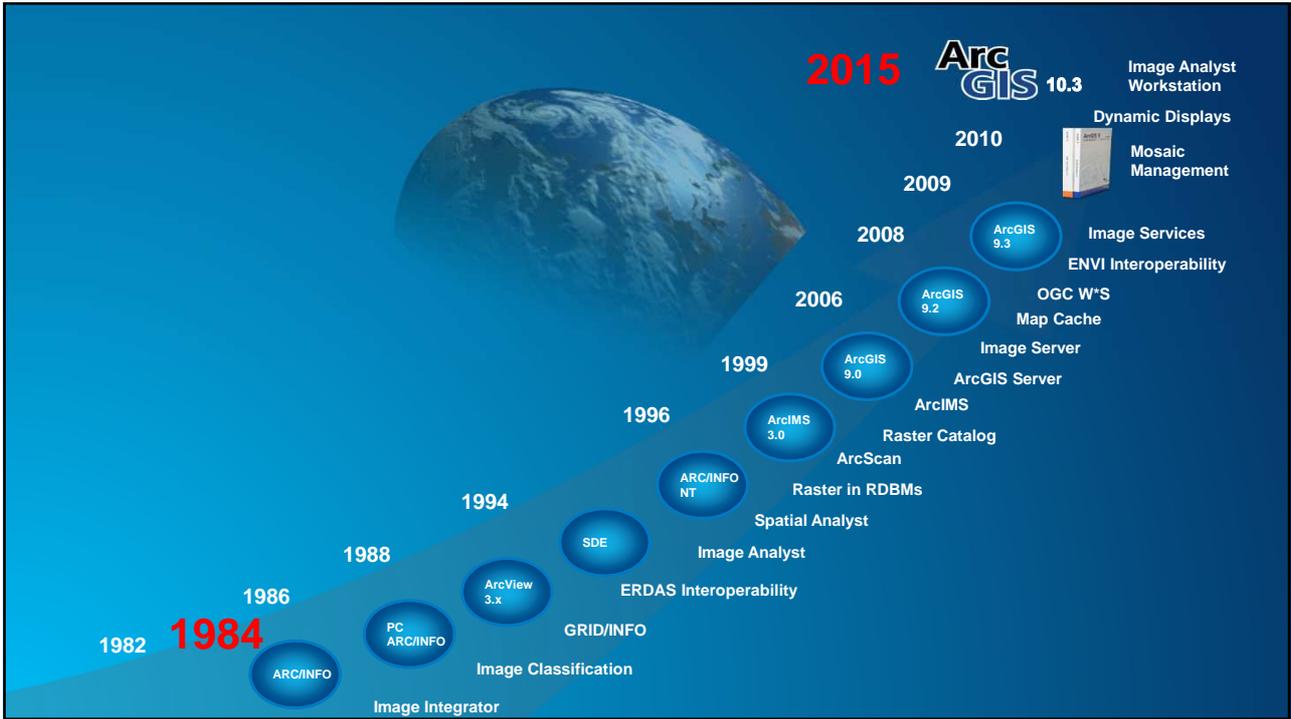
Marathon Data Systems - ESRI

Elias Lazarou

Marathon Data Systems
Esri Official Distributor

Marathon Data Systems

- 30 years of experience in the field of Geographic Information Systems.
- Official Esri distributors in Greece and Cyprus for 30 years.
- Numerous ArcGIS licenses in organizations/authorities such as:
 - *Military*
 - *Ministries*
 - *Cadastre*
 - *Local government*
 - *Private sector*
 - *Academic Institutions etc...*



User Applications

Making a Difference

Population Growth Nature Conservation Oceans Transportation Government Human Health Agriculture
 Utilities Environment Energy Infrastructure Business Climate Change Urbanization & Development Education
 Economic Recovery Water Resources Social Conflicts Pollution Defense & Security Mapping Science & Technology

ArcGIS can be found on:

- *public sector*
- *private sector*
- *local government*
- *Academia*

...And their applications cover almost any aspect:

- Agriculture
- Utility networks
- Telco
- Urban Planning
- Local government
- Sales
- Marketing
- Tourism
- Internet Applications
- Multimedia
- Map production
- Archeology
- Transportations
- Telecommunications
- Satellite imagery
- Field GIS
- Remote Sensing
- 3D models
- Databases
- Environmental Design
- Education
- Cartography
- Street networks
- Hydrographic networks
- Statistics
- Health etc.

ArcGIS

An Integrated Web GIS Platform

Providing Mapping, Analysis, Data Management, and Collaboration



Apps

Access

Services

Available on the Open Web . . .
. . . and On-Premises

ArcGIS

Provides a Common Platform

Knowledge Workers
and Executives

Developers

GIS Professionals

ArcGIS

Supporting and Connecting Multiple Communities



ArcGIS Desktop Professional GIS Applications

New

- Intuitive
- Fast (64 bit)
- Multiple Layouts
- 2D / 3D
- Create Web Maps
- Tasks and Projects

Improved

- Quality
- Performance
- Cartography
- Analytics
- Image Processing
- Security (PKI)

ArcMap **New ArcGIS Pro**

Side-by-Side

Providing Mapping, Visualization, Editing, and Analysis

*Continued Support . . .
... with Dramatic Improvement*

ArcGIS Pro

ArcGIS Desktop Includes ArcGIS Online

- Unlimited Web Mapping
- Data Hosting
- Living Atlas
- Many Apps

Desktop Web GIS Users Apps Anonymous Access

... Extending Your Capabilities

Spatial Analysis

Supporting Demands for Better Understanding

Desktop

- Space-Time Pattern Analysis
- 3D Analysis
- Flow Visualization
- Improved Modeling
- Multidimensional Data
- Big Data
- Infographics

Online

- Interpolation
- Terrain
- Density
- Route Optimization
- Drive-Time Areas
- Buffer
- Find Nearest
- Aggregation
- Overlay
- Hot Spots
- GeoEnrichment

Advancing the Science of Geography

3D

Enabling Visualization and Analysis on Desktops, Browsers, and Devices

- Web Scenes
- Lidar Analysis
- Rule-Based Symbology
- Editing and Designing



Imagery

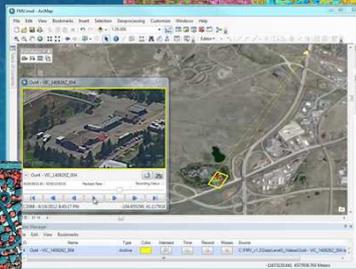
Managing, Analyzing, and Serving Intelligent Imagery

- Scientific Formats (HDF, GRIB, NetCDF)
- Segmentation and Classification Tools
- Visualization and Analytics

Segmentation



Full Motion Video



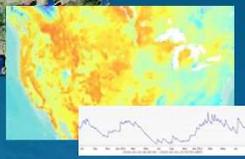
Dynamic Products



Impervious Surface



Multi-dimensional Data



Landsat Services

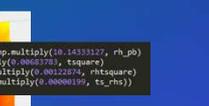


On-the-Fly Processing

```
Process
out_pb = (-0.379 + np.multiply(0.0000525, t_pb) + np.multiply(10.14333127, rh_pb)
         - np.multiply(0.22470541, rht) - np.multiply(0.00027781, tsquare)
         + np.multiply(0.05483717, rtsquare) + np.multiply(0.00122874, rhtsquare)
         + np.multiply(0.00002562, rtsquare) - np.multiply(0.00000319, ts_rh))

Output
def bind(self, **kwargs):
    kwargs["output_rasterinfo"]["bandcount"] = 1
    kwargs["output_rasterinfo"]["pixeltypes"] = "32_BIT_FLOAT"
    return kwargs
```

Advanced Visualization

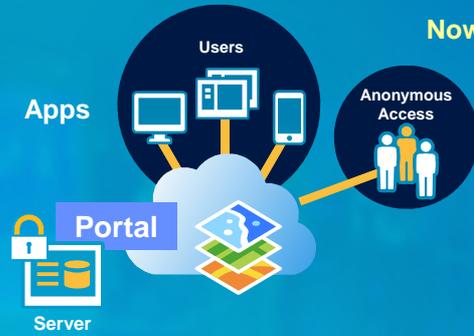


Supporting Single Scenes . . .
. . . and Massive Collections

ArcGIS

Server

Enterprise GIS in Your Own Infrastructure



Now a Web GIS

New

- Portal (Included)
- Custom Roles
- 3D Services
- Real-Time Services



Monitoring Tools

Improved

- Scalability and Quality
- Authentication (SAML)
- Active Directory Support



Improved Server Experience

Providing Geodata Management, Analysis, and Mapping

... Supporting On-Premises and Hybrid Systems

Real-Time

Supporting Geographic Monitoring and Alerting

- Many Sensors
- Spatial Analysis
- Stream Service
- Big Data



PG&E

Arctic Shipping and Sea Ice



Exact Earth



OSInfo Dashboard



Big Data

GeoEvent Extension

ArcGIS Online Cloud-Based Web GIS

Apps

- Users
- Anonymous Access

Providing Mapping, Analytics, and Content

- Across the Organization
- Always Available
- Massively Scalable

Improved

- User Experience
- Mapping
- Analytics
- Management
- Security

New

- Self-Service Mapping
- Management
- Related Tables
- Custom Roles
- Certification
- Marketplace

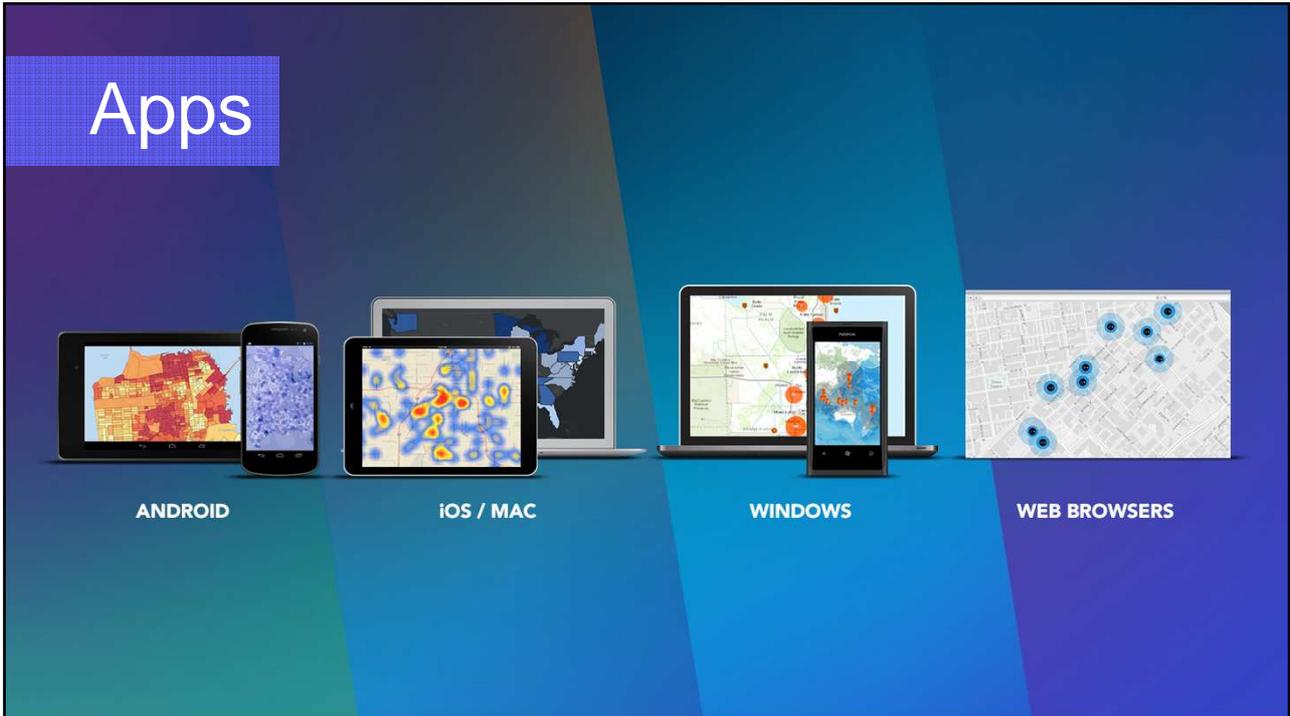
Content A Ready to use data

Landscape

Basemaps

Imagery

Demographics



Marathon Data Systems



Understanding our world.

Thank you