ArcGIS in the Cloud

Transforming the way we think about GIS. . .
Deployment models... leverage virtualization technologies
“Cloud Services” are nothing new...
ArcGIS 10
The new platform for cloud GIS

Cloud Computing
- ArcGIS Server on Amazon
- Hosting by ESRI
- Others . . .

Solutions
- Business Analyst
- ArcLogistics
- Partners . . .

Maps & Apps
- Content
- APIs
What Is the Cloud?

- **Software as a Service (SaaS)**
  - End-user applications delivered as a service rather than on-premises software

- **Platform as a Service (PaaS)**
  - Application platform or middleware on which applications can be built

- **Infrastructure as a Service (IaaS)**
  - Compute, storage, or other IT infrastructure as a service

- **Software + Services (S+S)**
  - Leveraging hosted services with locally installed software applications
ESRI and the Cloud

End-user applications delivered as a service rather than on-premises software

Application platform or middleware on which applications can be built

Compute, storage, or other IT infrastructure as a service

Leveraging hosted services with locally installed software applications

ESRI Business Analyst Online
ArcGIS Explorer Online
Web Mapping APIs
Azure – Silverlight API
ESRI Online Data Center
ArcGIS Server AMI
Map Caching – S3
MapIt
ArcGIS + Online Content

Software as a Service (SaaS)
Platform as a Service (PaaS)
Infrastructure as a Service (IaaS)
Software + Services (S+S)
Cloud Provides a New Pattern For Deploying GIS

- Easy access to servers
- Extend existing systems
- Elastic scalability
- Managed infrastructure
- Off-site redundancy

ArcGIS Server allows you to take advantage of the Cloud today
Elastic Cloud Computing with Amazon

Build even more resilient Web apps
New monitoring, auto scaling, and elastic load balancing features for Amazon EC2 now available.

Get Started

News & Events

Business Managers
Learn how Amazon Web Services enables you to reach business goals faster:
- Solutions & Use Cases
- Security Center
- Economics Center
- Case Studies
- Service Health Dashboard
- Solution Providers

http://aws.amazon.com/ec2/
ArcGIS Server on Amazon EC2

Complements and Extends Your On-Site Server Infrastructure

- Reduces complexity of deployment
- Ideal for
  - Compute-intensive situations
  - Public Web sites
  - Development and staging environments
  - Short term
- Packaged with Amazon EC2

Use an existing ArcGIS Server license or purchase as a bundle
Ready to use ArcGIS Server 10 AMIs

ArcGIS Server Advanced Enterprise 10
• On Windows 2008 R2
• Image Extension (optional)

ArcGIS Enterprise Geodatabase 10
• On PostGreSQL
ArcGIS.com

A New Platform for GIS Professionals

Provides

• High Quality Content
• API’s for Development
• A Framework for Sharing
• Easily Discoverable Applications
• User Communities
ArcGIS.com
A Complete GIS Implemented In the Cloud

Users Can Create, Share, Find and Use . . .
. . . Data, Maps and Applications
## Common Cloud Benefits

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Benefit Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Total Cost of Ownership</td>
<td>Reduced ongoing and life cycle costs</td>
</tr>
<tr>
<td>Increased Availability</td>
<td>Always on, always available</td>
</tr>
<tr>
<td>Faster Application Delivery</td>
<td>Expedites time to market; competitive advantage</td>
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<tr>
<td>Flexible Model</td>
<td>Scales by demand; no wasted capacity</td>
</tr>
<tr>
<td>Enables Collaboration and Community Computing</td>
<td>Platform for easier and faster information sharing, mobile workforce</td>
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<tr>
<td>Improved Business Continuity</td>
<td>Inexpensive disaster recovery options</td>
</tr>
<tr>
<td>Rental Pricing Model</td>
<td>Pay-as-you-go; pay-in-advance; try before you buy</td>
</tr>
</tbody>
</table>
Esri Cloud Resources

• Esri Cloud Offerings
  • http://www.esri.com/technology-topics/cloud-gis/index.html

• Esri Whitepaper – Estimating he cost of GIS in the Amazon Cloud

• GIS in the Cloud – The Esri Example