



NOAA GeoPlatform

Environmental Data Management Conference

Cloud Computing Session

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NOAA GeoPlatform – Outline

- What is it? / Capabilities
- Cloud Management Approach (SaaS, PaaS, etc.)
- Cloud Implementation Details: Infrastructure, Networking, IT Security
- Challenges and Opportunities



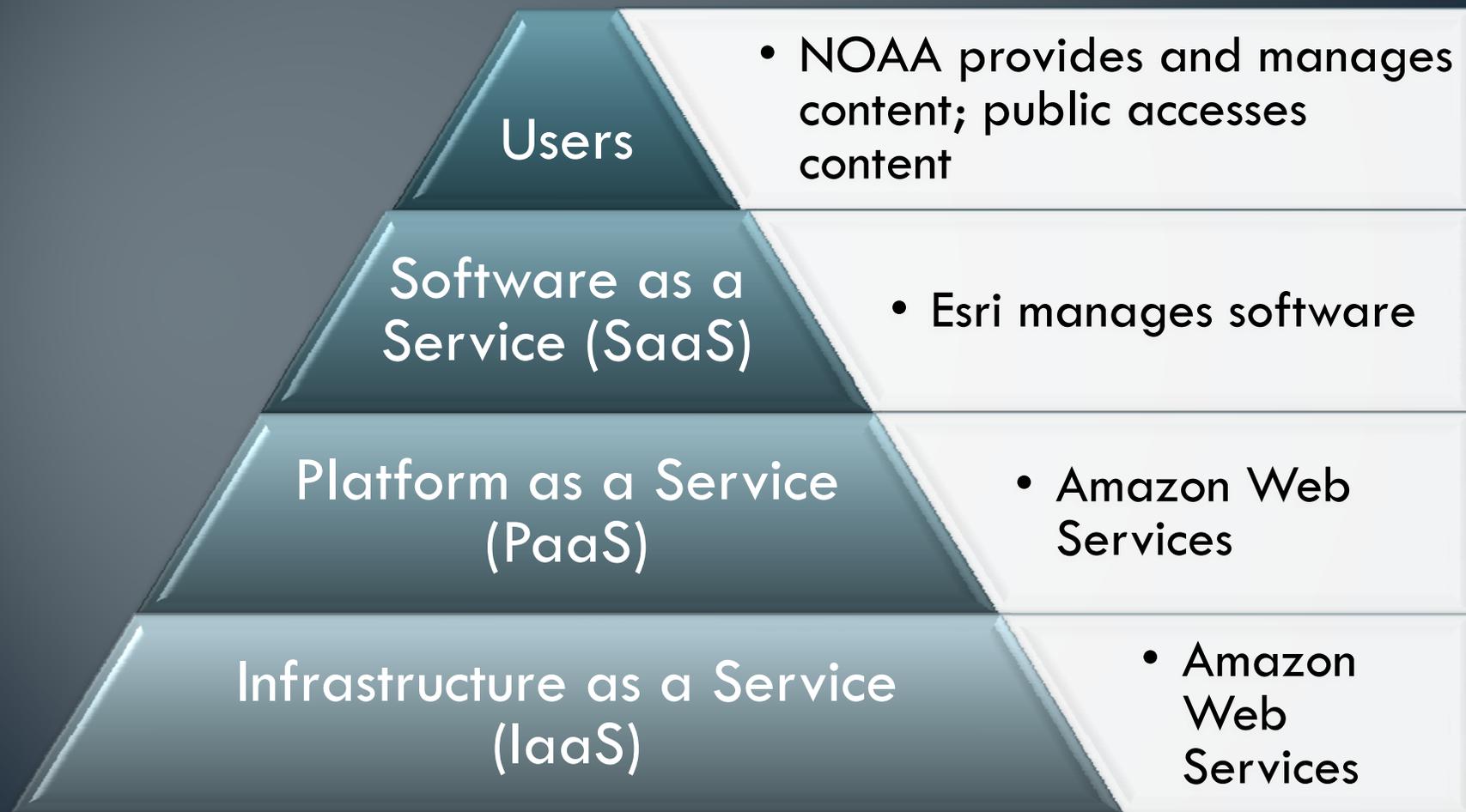
NOAA's GeoPlatform

www.noaa.gov/geoplatform

- What is the NOAA GeoPlatform?
 - Website that provides a central location for NOAA staff and constituents to share, discover, and access NOAA's distributed geospatial maps, applications, services, and tools
 - Agency implementation of Esri's Portal for ArcGIS (based on ArcGIS Online platform)
- Capabilities
 - Provides ability to register geospatial content in the form of user-friendly records
 - Content types that may be registered:
 - Services (KML, OGC web services, ArcGIS Server services)
 - Applications and Websites
 - Maps created on the NOAA GeoPlatform
 - Easy-to-use online map viewer for quickly and easily visualizing data
 - Allows for both internal [NOAA] collaboration and external [public] use



Cloud Management Approach





Cloud Implementation Details

- Infrastructure
 - Development and Staging both hosted on Amazon Web Services EC2 cloud
 - Production site sits on AWS load balanced production servers
- Networking
 - An SSL Site Certificate has been purchased and installed for www.geoplatform.noaa.gov
 - Next Step: Implement DNS redirect that points noaa.gov url to the AWS load balanced production URL
- IT Security
 - NOAA's infrastructure security requirements met: Amazon has been authorized to operate at FISMA Moderate level
 - NOAA's software security requirement not met (yet): NOAA IT Management requiring documentation from Esri on configuration of their software on the AWS infrastructure
 - With proper documentation, a "risk acceptance" memo will be signed and the DNS redirect will be put into place



Challenges and Opportunities

- Challenges

- IT Security requirements for using the cloud have been somewhat vague
 - One end of spectrum is a simple waiver
 - Other end of spectrum are detailed Security and Risk Assessment Reports
 - Reality: Somewhere in the center. Providing proper existing documentation from AWS and Esri satisfies NOAA IT security requirements

- Opportunities

- All of the inherent benefits in using the “Cloud”
- First NOAA project to use commercial vendor for PaaS/IaaS? Opens door for other projects?



Questions

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Hear more tomorrow during the Geoportal and GeoPlatform session.