Integrating EPA Enterprise Resources with EPA GeoPlatform

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The EPA GeoPlatform is a shared, One EPA technology and governance framework, which encompasses a community of expertise as well as a suite of geospatial tools, data and services that will help coordinate and consolidate mapping activities, applications development and data management across the Agency.
EPA GeoPlatform resources were used for some high profile White House and EPA climate change initiatives including the new EPA Clean Power Plan.

Designated EPA GeoPlatform Administrators for each EPA programs, regions, research labs

EPA Deputy Administrator officially announced EPA GeoPlatform in May 2012
Integrate EPA NCC Enterprise Resources with EPA GeoPlatform

Integrating EPA Enterprise Authentication with EPA GeoPlatform Online on Amazon Cloud

Integrating EPA enterprise hosting resources with EPA GeoPlatform Online on Amazon Clouds seamlessly

Integrating EPA GeoPlatform Analytics and Reports with EPA Enterprise Resources to produce more useful usage information
EPA GeoPlatform Original Authentication Process

Users send the request for EPA GeoPlatform accounts

EPA GeoPlatform Admin manually create new user account and send the invitation email to users

Users receive email invitations with instructions on how to activate accounts and access the EPA GeoPlatform system

Users reset passwords and set up answer to security questions and other required information

Users login to EPA GeoPlatform system with the new account and password.

This entire process may take from 1 hour to several days to complete.

• More than 450 users never login to EPA GeoPlatform system
• Some users forget their usernames, passwords, and answers to the security questions, and eventually gave up.
• Some users need repeated assistances to reset or recreate their accounts
• Some user accounts cannot be completely removed from the EPA GeoPlatform system.
Integrating EPA Enterprise Authentication with EPA GeoPlatform Online on Amazon Clouds

- This process is **100% automatically** and require **NO manual intervention**. The entire process takes **about 1 minute**.
- EPA users can use the same EPA enterprise accounts to login to EPA GeoPlatform automatically as they do with their emails and EPA machines.
- Dramatically improve EPA user experiences with new Esri products such as Map for MS Offices and ArcGIS Pro that require the login to EPA GeoPlatform system.
- Found a bug with Esri GeoPlatform account naming process.
EPA Identity Provider SAML Assertion

SAML 2.0 assertion only contains 3 required items (username, user’s email, and account name).
Migrating Contents from Old AGOL Accounts to new EPA Enterprise Authentication Accounts

The EPA GeoPlatform system will create a new account automatically when login with EPA enterprise account the first time.

No need to wait for another email to "activate" the account and no need to set up and remember another new account name and password.

A comprehensive migration process will run every night at 11:00 PM EST to detect any newly created EPA GeoPlatform accounts based on EPA authentication and move all saved content and credential information from old existing EPA GeoPlatform accounts to the new one.
EPA SecureAuth Identity Provider can enable 2 factor authentication easily when needed.

EPA SecureAuth Identity Provider can enable PIV card authentication easily when needed.
EPA GeoPlatform Online is EPA’s instance of ArcGIS Online hosted on Amazon Cloud http://epa.maps.arcgis.com

EPA National Computer Center (NCC)

EPA NCC GeoPlatform hosting environment utilizes the high performance enterprise load balance system with both Linux and window servers. It includes redundancy and failover as well as additional security protection.
Integrating contents from different EPA GeoPlatform Locations Seamlessly

EPA GeoPlatform Online on Amazon Cloud
http://epa.maps.arcgis.com

Hosting:
- Webmaps
- Storymaps
- Journalmaps
- Some small data
- Search functions
- WebApplicationBuilder

EPA GeoPlatform hosting environment in the EPA NCC, Durham, North Carolina, hosting:
- Median and large EPA data and data services.
- Web apps entry pages.
- GIS services with data from EPA production databases in the EPA NCC
- GIS apps and data that are not for public access.
- Some geoprocessing services
- EPA Shared Enterprise Geospatial System (SEGS).
- EPA Environmental Data Gateway (EDG).

EPA GeoPlatform resources in EPA Regions and research labs across the county, including:
- Regional Specific GIS apps and databases.
- GIS apps and data for EPA research purposes.
- EPA emergency response related GIS apps and data in each EPA regions.
- Customized WebApplicationBuilder and widgets
EPA web apps entry pages are hosted in the EPA NCC, Durham, NC

EPA webmaps and storymaps are hosted with the EPA GeoPlatform on Amazon

EPA GIS data services are hosted in the EPA NCC, Durham, NC

EPA NCC GeoPlatform Environment in Durham, North Carolina.

EPA GeoPlatform Online on Amazon Cloud http://epa.maps.arcgis.com

Fact Sheet: What Climate Change Means for Delaware and the Northeast

FOR IMMEDIATE RELEASE
May 6, 2014

Today, the Obama Administration released the third U.S. National Climate
EPA 2014 Ozone Map Application

EPA NCC GeoPlatform Environment in Durham, North Carolina.

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EPA web apps entry pages are hosted in the EPA NCC, Durham, NC

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San Diego-Carlsbad-San Marcos, CA

In 2014, there were 12 days when ozone levels reached "code orange" (unhealthy for sensitive groups) or above on the Air Quality Index (AQI). The population of San Diego area is 3,120,279 (2010 Census).

The line graph below shows the general trend in the number of days since 2000. Hover over the graph to see actual numbers for a given point.
EPA 2014 PM 2.5 Map Application

EPA NCC GeoPlatform Environment in Durham, North Carolina.

EPA GIS data services are hosted in the EPA NCC, Durham, NC.

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EPA GIS data services are hosted in the EPA NCC, Durham, NC.

In 2014, there were 4 days when PM2.5 levels reached "code orange" (unhealthy for sensitive groups) or above on the Air Quality Index (AQI). The population of Denver-Aurora, CO area is 2,601,114 (2010 Census).

The line graph below shows the general trend in the number of days since 2000. Hover over the graph to see actual numbers for a given point.
EPA GeoPlatform only contains name, email address, and account name for all users. It does not have any other additional information such as office affiliations.

EPA GeoPlatform provides basic usage statistics for all users. It cannot analyze these basic usage data for different EPA organizations.

EPA GeoPlatform managers need to know how many users in their organizations and how many contents published by their organizations.

Comprehensive tools are developed to integrate EPA GeoPlatform functions with EPA enterprise resources.

Scripts to evaluate EPA GeoPlatform usage data for individual EPA organization.

User-friendly tools to enable EPA GeoPlatform admin to easily detect and resolve problems with published contents on EPA GeoPlatform.

Efficient tools to monitor the performance of important EPA GeoPlatform applications and services.

Effective tools to help EPA GeoPlatform users to search and share resources from different EPA organizations.
Question

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Ask Me A Question
It's Free