Automating Enterprise GIS Administration using Python

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BILL MAJOR
Automation & Scripting

- IoT
- Sensor Networks
- Smart Mapping
- Advanced Analytics
- Smart Devices
- Real-Time
- Web Services
- Distributed Computing
- Automation & Scripting
- Drones
- Big Data
- Live Content
- DevOps
- SLA
- Smart Mapping
- Trusted Collaboration
- Sensor Networks
- Remote Sensing
- Streaming Data
- Visualization
Automate and Script your Web GIS

ArcGIS Python API - GIS workflow automation

Analytics

Content Management

Org Administration

Software Operations (HA, DR)

Chef, Cloud Formation, Cloud Builder, and a new Enterprise Builder (10.5.1) - GIS infrastructure automation
ArcGIS API for Python

• A new *Python API for your Web GIS*, which could be online or on-premises
  - Modern, powerful, easy-to-use
• For use by anyone who has workflows that require automation or scripting
  - org administrators
  - content publishers
  - analysts and data scientists
  - power users and developers
• Access the power of your Web GIS
  - Including GeoAnalytics and Raster Analytics
Agenda

• Portal API
  - Managing Users and Roles
  - Importing SSL Certificates
  - Portal Logs and Metrics

• Server API
  - Accessing from Portal
  - Start/Stop/Delete Services
  - Managing Services
  - Logs and Statistics
Automating Enterprise GIS Administration using Python

Andrew Chapkowski

Bill Major

Esri User Conference, July 2017

Demos
Using Jupyter Notebooks with Reveal.js
Script and automate your Web GIS

The ArcGIS API for Python lets ArcGIS Online and ArcGIS Enterprise users, analysts, developers, and administrators script and automate tasks ranging from performing big data analysis to content management and administration of their web GIS. The API integrates well with the Jupyter Notebook and the Scikit stack and enables academics, data scientists, and GIS analysts to share programs and reproducible research with others.
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**Schedule**

**ArcPad - An Introduction**

**Description**

This session will provide an overview of ArcPad, Esri's software for mobile GIS and field mapping, with an emphasis on the new features and capabilities.
Other Useful Python API Technical Workshops

- Administering ArcGIS Enterprise and ArcGIS Online with Python (Tech Workshop)
  - Tuesday 8:30am, Thursday 8:30am

- Mapping, Visualization, and Analysis Using ArcGIS API for Python
  - Tuesday 8:30am

- ArcGIS Python API: Introduction to Scripting your Web GIS
  - Tuesday 10:15am, Wednesday 10:15am

- ArcGIS Python API: Advanced Scripting
  - Thursday 10:15am, Friday 9:00am

- ArcGIS Enterprise: The Road Ahead
  - Wednesday 3:15pm, Thursday 1:30pm
Other Useful Python API Demo Theater Sessions

- Automating Enterprise GIS Administration using Python
  - Tuesday 4:30pm

- Cloning Your Portal Users, Groups and Content using ArcGIS API for Python
  - Tuesday 12:30pm, Wednesday 2:30pm

- ArcGIS Python API for GIS Analysts and Data Scientists
  - Tuesday 2:30pm

- Scripting and Automation for the Web GIS Power User
  - Tuesday 5:30pm, Wednesday 4:30pm

- ArcGIS Python API for Administrators and Content Publishers
  - Thursday 12:30pm