ENVI & IDL Services Engine
For Web-Accessible
Multi- & Hyperspectral Applications
HyspIRI Products Symposium

Goddard Space Flight Center
May 30, 2013
IDL
DISCOVER WHAT’S IN YOUR DATA

> Language for Analysis, Rules, and Conventions
> Interactive Graphics System
> Development Environment
> Customize ENVI Products with IDL
> Output File Formats
ENVI Platform
IMAGERY AND DATA BECOME KNOWLEDGE

> ENVI
> ENVI | LiDAR
> ENVI | SARscape
> ENVI | Services Engine
ENVI LiDAR
IMAGERY AND DATA
BECOME KNOWLEDGE

> Prepare LiDAR Data for Geospatial Analysis
> Identify & Extract 3D Features
> Export Results to ENVI and ArcGIS
Extending ENVI with IDL
- Custom algorithms
- Batch Processing in IDL using the ENVI API

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ENVI Services Engine

Create

> Configure seamlessly with your existing infrastructure
> Create and publish web deployed image analysis tools
> Consume ENVI from mobile, web, and thin clients
> Get geospatial imagery where and when you need it

Deploy

Access

Create Deploy Access
Configure seamlessly with your existing infrastructure

> Configure seamlessly with your existing infrastructure
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Create and publish web deployed image analysis tools

Create

App Developer

• ENVI
• IDL
• Python
• Java
• C++
• Others

Deploy

IMAGE ANALYSIS SERVICES
STORAGE / SERVER
DATA
MIDDLEWARE
BUSINESS LOGIC
OTHER SERVICES

EXELIS | Visual Information Solutions

September 6, 2013
Consume ENVI from mobile, web, and thin clients

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ENVI Services
ONLINE, ON-DEMAND, GEOSPATIAL AWARENESS

Deploy

Access

Web
Mobile
Desktop
Developers create apps with ENVI+IDL, Python, or other development tools and publish them to the engine.

Middleware agnostic design integrates through HTTP.

ENVI Services Engine manages ENVI+IDL processes.

End users interact via their interface of choice.

Discrete online apps simplify updates to users.
ENVI & IDL Services Engine
IDL Application Deployment Model

```idl
pro rel_water_depth, $  
  fname, $  
  ul_xcoord, $  
  ul_ycoord, $  
  lr_xcoord, $  
  lr_ycoord, $  
  rgb_out_name, $  
  shapefile_out_name, $  
  status=status, $  
  ;error_str=error_str, $  
  ;simple=simple

  compile_opt idl2, logical_predicate

  ; generic catch
  ;
  catch, error_status
  catch, error_status=envi_cancel_catch()  
  if (error_status ne 0) then begin
    help, /last, output=msg
    error_str = [error_str, msg]
    print, error_str
    return
  endif

  ; initialize variables
```
RelativeH2O.zip (Upload Complete)
This site is for demonstration purposes of the ENVI Services Engine. Authorized Use Only.