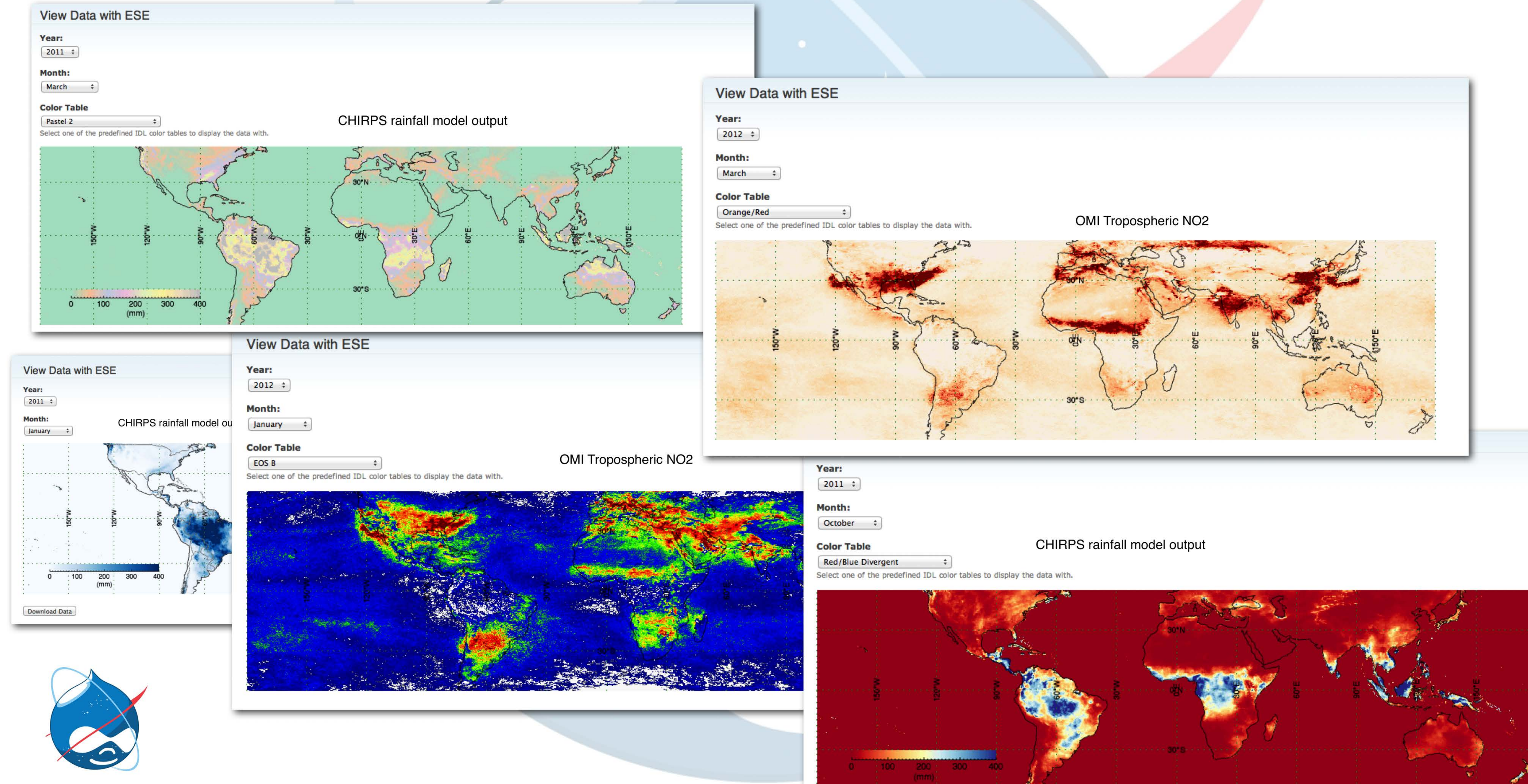


Connecting IDL/ENVI on the Cloud through a Drupal Module: introducing the IDL/ENVI Bridge Module (1.0) from Science on Drupal Central

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Drupal 7 module administration-view exposes ENVI & IDL SE commands*

ESE Map Settings

Home > Administration > Configuration > ESE

ESE Map Settings

This interface allows administrators to manage the ESE Map Settings

ESE data set to display *

chirps

Enter the data set name. (chirps, NO2)

Initial year of data to display *

2012

Enter four digit year (2014).

Initial month of data to display *

1

Enter numeric month (1, 2, ..., 12).

DISPLAY OPTIONS

MAP U.S. STATE BOUNDARIES (Optional)

When enabled, usa outlines will be rendered.

Line color

Black

Select the color of the boundary outlines. The default is "black".

Line style

Solid line

Select the line style of the boundary outlines.

Line thickness

1.0

Enter a value between 0.0 and 10.0 for line thickness. Default is 1.

MAP CANADIAN PROVINCE BOUNDARIES (Optional)

When enabled, Canadian province outlines will be rendered.

Line color

Black

Select the color of the boundary outlines. The default is "black".

Line style

Solid line

Select the line style of the boundary outlines.

Line thickness

1.0

Enter a value between 0.0 and 10.0 for line thickness. Default is 1.

COLORBAR OPTIONS

ENABLE COLORBAR (Optional)

When enabled, a colorbar will be rendered.

Colorbar position

0,05,0,15,0,25,0,20

Enter a comma separated value for the left,bottom,right,top side in realtive coordinates. (Example: 0,05,0,15,0,25,0,20).

Colorbar title

(mm)

Enter a title for the colorbar. (mm), (10⁻¹⁵ mol/cm²)

MAP GRID OPTIONS

Enable Map Grid (Optional)

When enabled, a Map Grid will be rendered.

Line color

Forest_Green

Label color

Black

Line thickness

1.0

Enter a value between 0 and 10 for line thickness.

Latitude and longitude line spacing

30.0

Enter a value in degrees for spacing between grid lines.

Line style

Dotted

Label alignment

0.5

Enter a value between 0.0 and 1.0, (0.0 is left justified, 1.0 is right justified).

MISCELLANEOUS OPTIONS

DEBUG Mode

When enabled, debugging statements will appear on the page.

MINIMUM VALUE (Optional)

0

A scalar or array giving the minimum image data value to be used when displaying the data. For byte data the default is 0. For other data types the default is the minimum data value. Tip: If you have a byte data that does not span the entire 0-255 range, you could set the MINIMUM VALUE and MAXIMUM VALUE properties to the minimum and maximum data value to stretch the data to fill the 0-255 range. Or, instead, you could set the COLOR TABLE to a color table that only contains colors that span your data values.

MAXIMUM VALUE (Optional)

400

A scalar or array giving the maximum image data value to be used when displaying the image. For byte data the default is 255. For other data types the default is the maximum data value. (examples: 400, 6.0e+015)

MARGIN (Optional)

0

Set this keyword to the data window margin values. Use a scalar value to set the same margin on all sides, or use a four-element vector (left, bottom, right, top) to specify different margins on each side. Margin values are expressed in normalized units ranging from 0.0 to 0.5. If not set, IDL defaults will apply.

COLOR TABLE

White/Blue

Select one of the predefined IDL color tables to display the data with.

LATITUDE RANGE for subsetting latitude range. (Optional)

Enter comma separated values for min and max latitudes. The default behavior is to plot the entire data range. (Example, -25,50 & 40,50)

LONGITUDE RANGE for subsetting latitude range. (Optional)

Enter comma separated values for min and max longitudes. The default behavior is to plot the entire data range. (Example, -125,-90 & -94,-74)

MAPPING OPTIONS

MAP CONTINENTS BOUNDARIES (Optional)

When enabled, continent outlines will be rendered.

Line color

Black

Select the color of the boundary outlines. The default is "black".

Line style

Solid line

Select the line style of the boundary outlines.

Line thickness

1.0

Enter a value between 0.0 and 10.0 for line thickness. Default is 1.

MAP COUNTRY BOUNDARIES (Optional)

When enabled, countries outlines will be rendered.

Line color

Grey

Select the color of the boundary outlines. The default is "black".

Line style

Solid line

Select the line style of the boundary outlines.

Line thickness

1.0

Enter a value between 0.0 and 10.0 for line thickness. Default is 1.

MAP LAKE BOUNDARIES (Optional)

When enabled, lakes outlines will be rendered.

Line color

Light_Steel_Blue

Select the color of the boundary outlines. The default is "black".

Line style

Solid line

Select the line style of the boundary outlines.

Line thickness

1.0

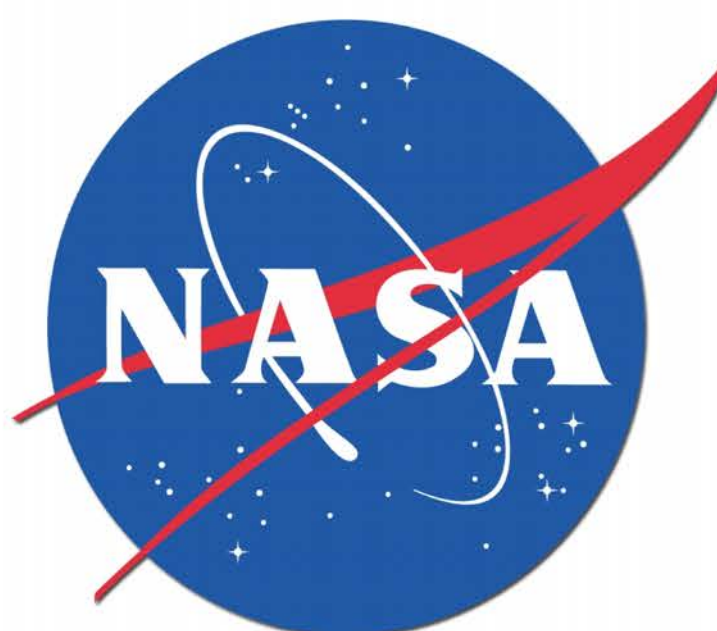
Enter a value between 0.0 and 10.0 for line thickness. Default is 1.

MAP RIVER BOUNDARIES (Optional)

When enabled, rivers outlines will be rendered.

Line color

Now you can configure your Earth data image properties inside Drupal.
 So your web developer can be tasked to format your data image and user interactivity without a line of code.



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*The module requires a current license to the ENVI & IDL Services Engine and to IDL and/or ENVI

What's on the Server? ENVI & IDL Services Engine For Web-Accessible Multi- & Hyperspectral Applications

Introduction

The geospatial community, including the field of environmental imaging spectroscopy, has a growing need for online on-demand analytic capabilities.

Work previously done on desktop workstations will migrate to a web-accessible environment to mitigate growing data volumes, bandwidth usage, and end user requirements.

Web based applications (or 'apps') are intended to apply analytic methods, procedures, and routines to image datasets stored within centralized server repositories.

Exelis Visual information Solutions (Exelis VIS) developed an enterprise-enabled processing engine, the ENVI & IDL Services Engine (ESE), that provides remote users access to the power of ENVI image analysis and IDL applications from a web or mobile client interface.

Background

The ENVI & IDL Services Engine (ESE), deploys data access, analysis, and visualization capabilities to the enterprise, either in the cloud, or within the data storage enterprise.

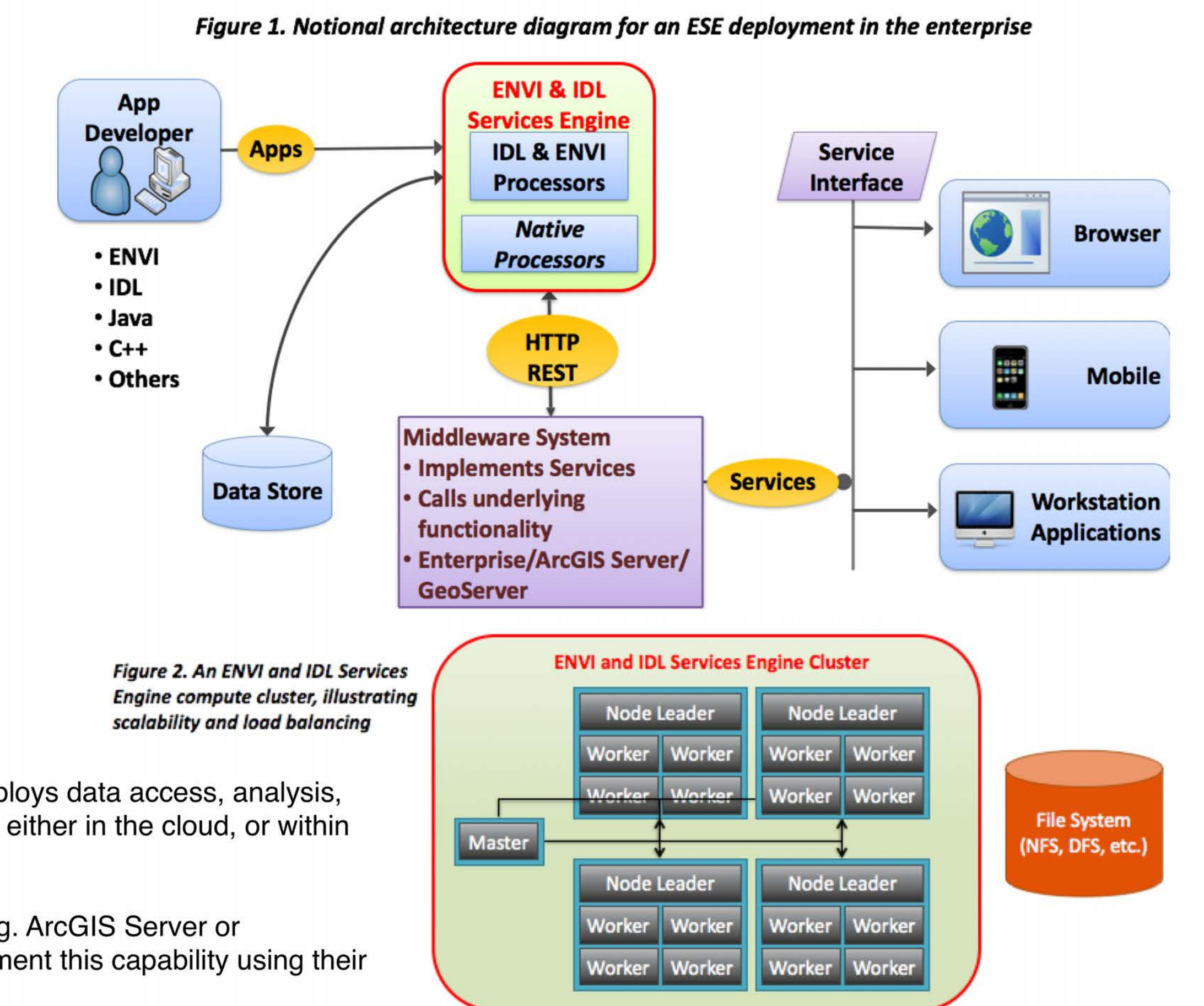
ESE can interoperate with any middleware (e.g. ArcGIS Server or GeoServer), meaning users can readily implement this capability using their current enterprise architecture.

Once an ENVI or IDL routine (i.e. application) is developed, it's simple to wrap it as a service and deploy it in ESE for consumption by remote end users, other apps, or services running in the enterprise.

The ENVI Services Engine provides REST-compliant web services. In particular, it is based on ESRI's GeoProcessing REST specification, which is expected to be adopted by the Open Geospatial Consortium (OGC).

ESE responds to processing requests by listening for HTTP calls in a RESTful state. HTTP REST requests made to the ESE from a middleware component will subsequently call and run ENVI and IDL routines, with the results being pushed back through the middleware components to the requesting application. See Figure 1.

The ENVI Services Engine is able to scale and load balance because of its REST architecture and is designed to run on a cluster. As requests arrive from any number of clients, the master web server will accept and route the request. If the request is for information about a task (or the system in general) then the master will return the requested information to the client. If the request is to perform a task, then the master will give the request to one of its worker processes. See Figure 2.



EXELIS

Visual Information Solutions

