Take 5 Geo Processing with ENVI Services Engine

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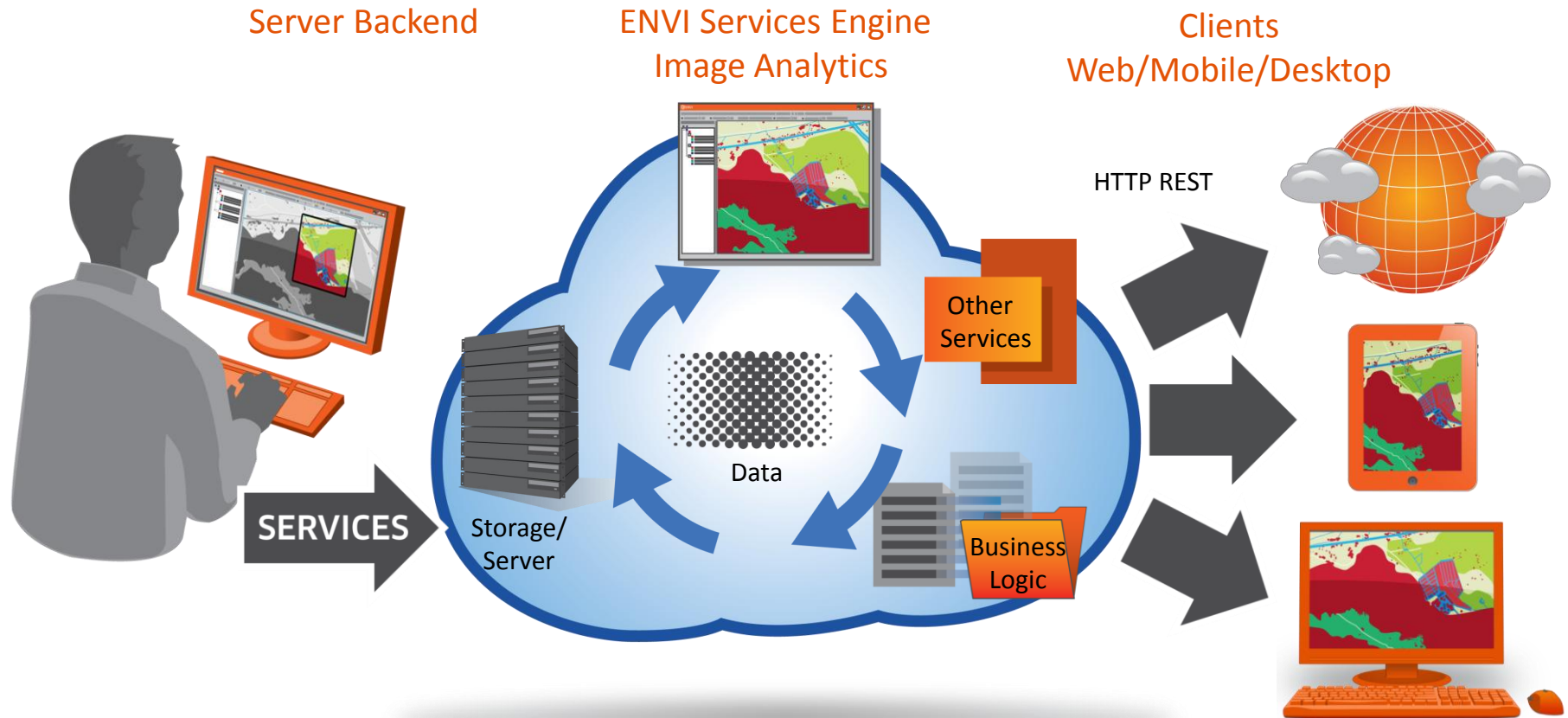
Take 5 Users day
October 2, 2013

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Contents

- ENVI Services Engine – Overview

- Developing Apps with IDL & ENVI : Landsat prototype

- Take 5 prototyping

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ENVI Services Engine – Overview

Server Backend

**ENVI Services Engine
Image Analytics**

**Clients
Web/Mobile/Desktop**

HTTP REST

SERVICES

Storage/
Server

Data

Other
Services

Business
Logic

Services Developer
> ENVI algorithms
> IDL pro code
> C++…

Systems Engineer
> Apache web server
> GeoServer
> J2EE – GXP Xplorer
> Catalog software
> ArcGIS Server
> …

Client Developer
> HTML5
> Native mobile
  (iOS, Android)
> Silverlight
> C++
> …

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Developing Apps with IDL & ENVI : Landsat prototype

Apps deployed in the Landsat implementation

- Encapsulate IDL/ENVI functions into discrete solutions.

- Use the deployment engine for on-demand IDL/ENVI processing.

- Operate on data accessed via a catalog implementation.

- Quickly re-purpose existing code.

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On-Demand Analytics – Web : Landsat prototype

Interactive "Change detection" App launched from browser interface

- User selects relevant App.

- Locates AOI.

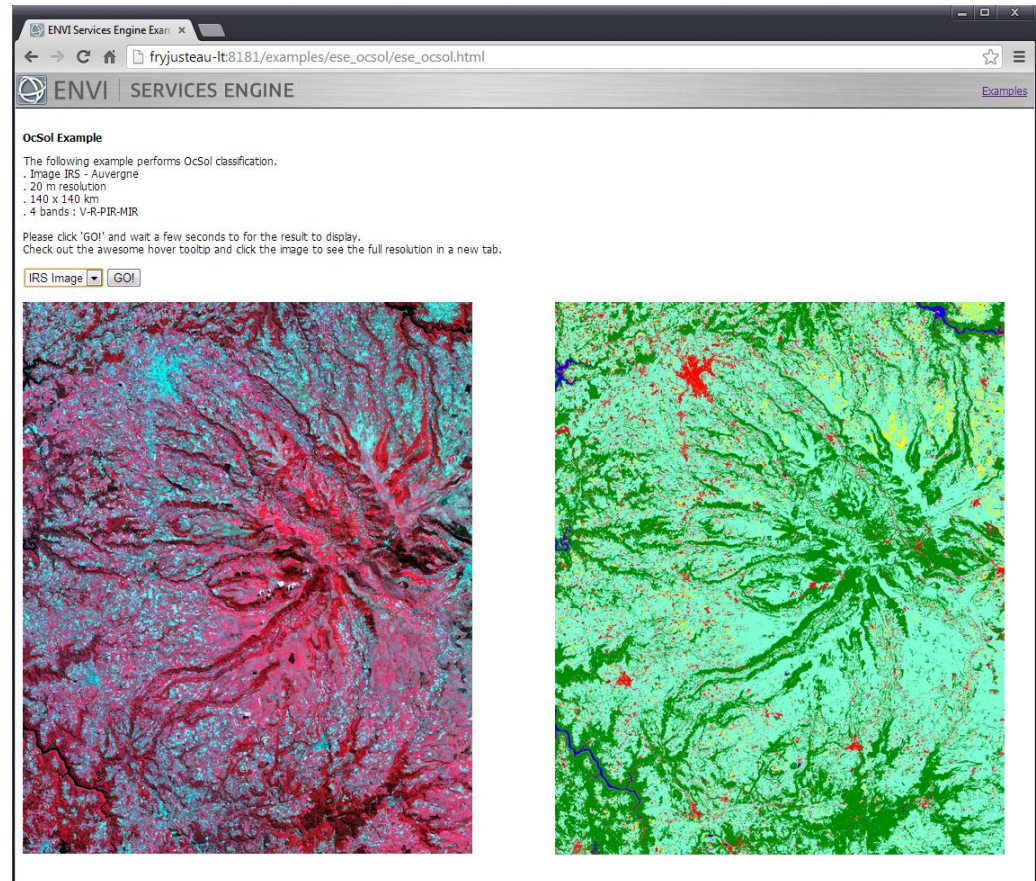- Select "before" and "after" images.

- On-demand IDL/ENVI service called.

- Results generated and displayed in a web client.

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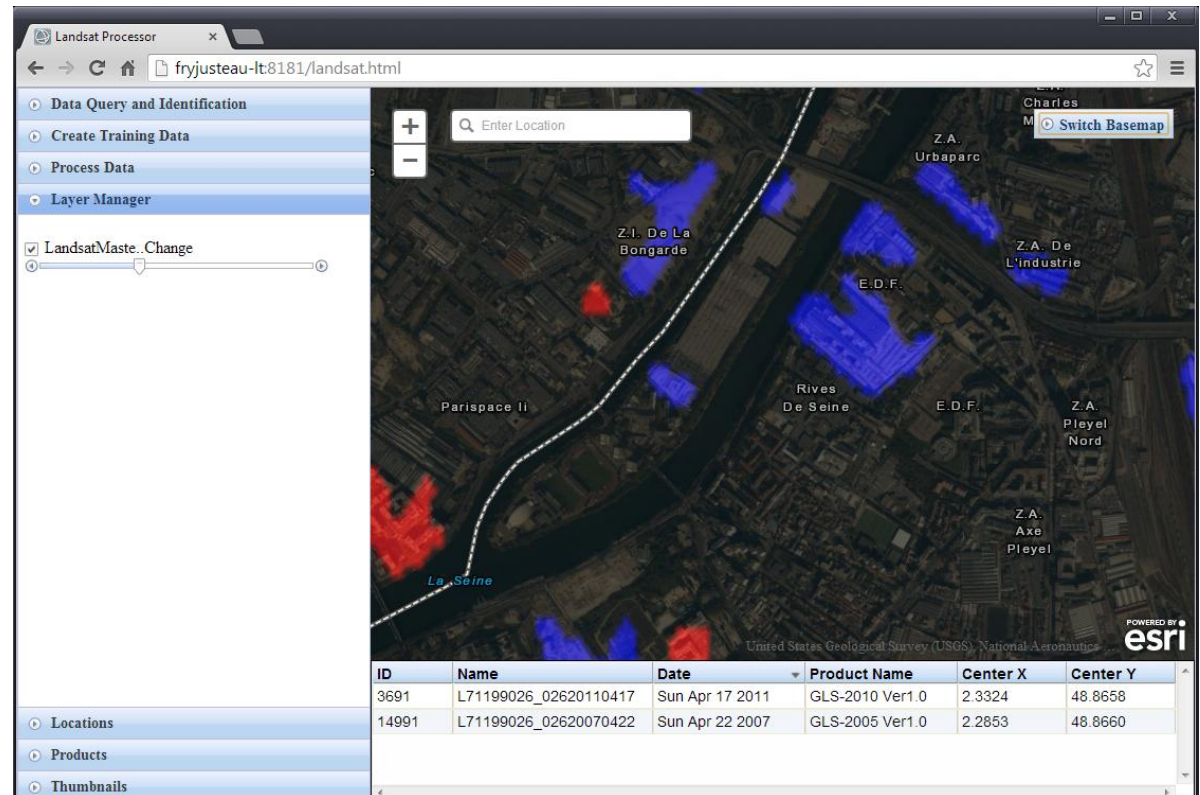
Build Take 5 prototype using ENVI Services Engine

- Demonstrate an online, on-demand approach to Take 5 data analytics.

- Allows experts to compile and expose their workflows and tradecraft using our prototyping platform.

- Provides the flexibility to integrate into any architecture that can make http calls.

- Takes advantage of open standards allowing for integration with other Apps.

- Emphasizes the use of server side hardware by offloading processing tasks previously performed at the desktop level.

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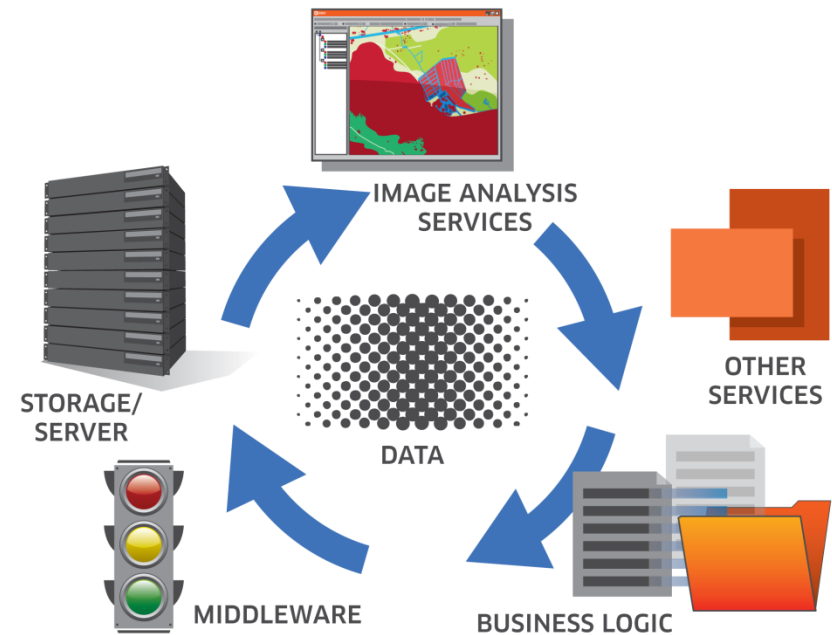
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Thank You

Questions & Discussion

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IMAGE ANALYSIS
SERVICES

STORAGE/
SERVER

DATA

OTHER
SERVICES

MIDDLEWARE

BUSINESS LOGIC

Scalability and Load Balancing

ENVI Services Engine architecture:
Master process and associated worker processes

Clients

ENVI Services Engine

Master and Node Leader

worker   worker

Node Leader

worker

worker

Node Leader

worker

worker

DFS or NFS

Services:
JSON wrapper
& pro code

Storage
(data…)

Apache server,
ArcGIS Server
…