IRAQ-MOWR

09/23/2019 Team Meeting

EROS Overview

FEWS-IRAQ Architecture
& Training Topics

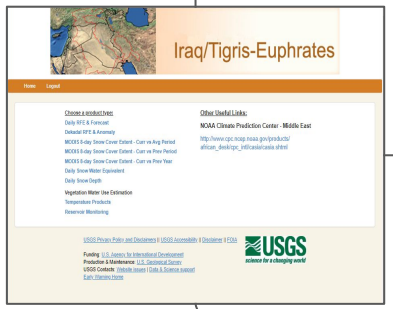
ArcGIS

SSEBOP Model

Landsat ET

Web Product DB (MySQL)

PHP - Laravel
IIS Web Server



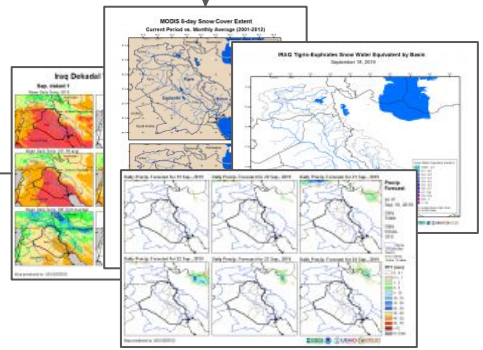
External Data Inputs

Local Data Inputs

Web Products
Python Product Generation (PPG)

Sched. Tasks

Manual Runs



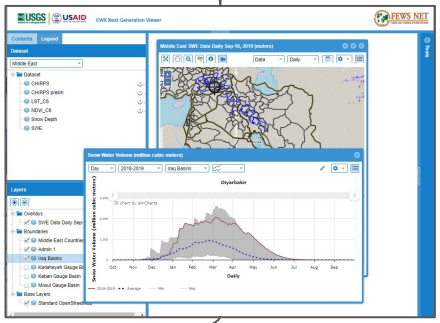
EWX Data (TIFF)

Basins & Other Inputs

GeoEngine

GeoServer

TIme Series DB (PostgreSQL)



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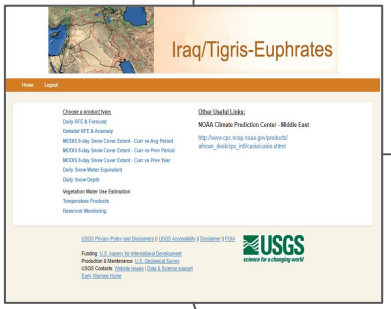

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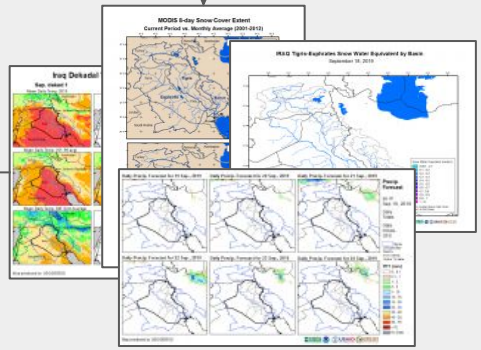

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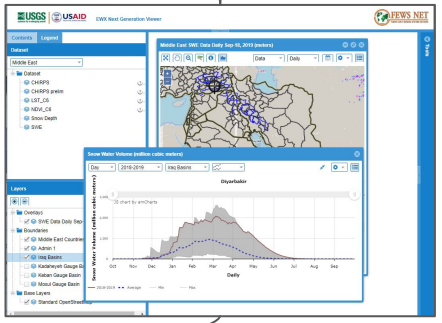

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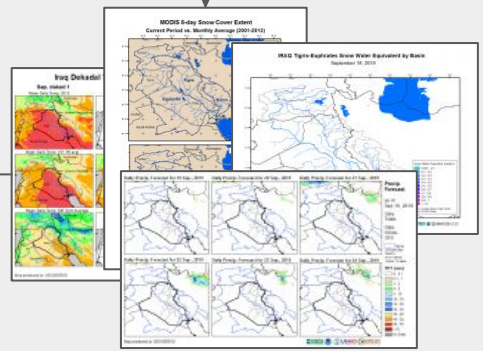
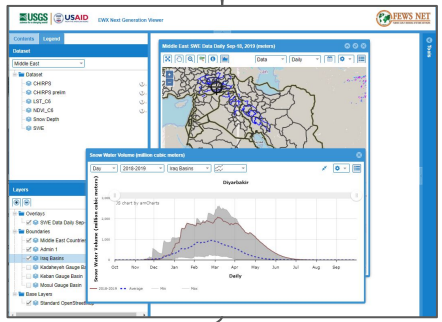




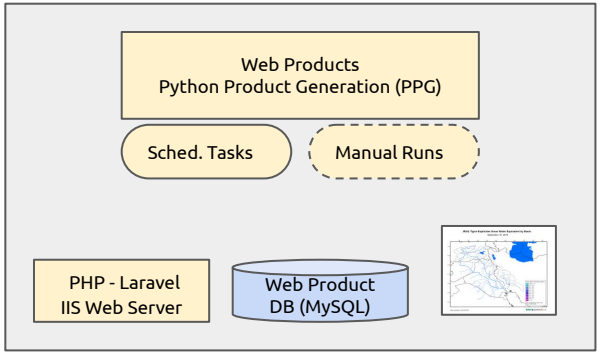
MOWR
Implementation Planning

MOWR Challenges

- Internet issues / Speed
- Power issues
- Server issues
  - Current servers run Windows Server 2008 (security risk)

Server Implementation

- Single Server
  - Would contain all components
    - Python code, products, website and database
- Multiple Servers
  - Server 1: Python and product server
  - Server 2: Website and database server
- Multiple Servers
  - Server 1: Python and product servers
  - Server 2: Database server
  - Server 3: Website Server



Note: When using multiple servers, there will need to be shared storage between the servers

EROS Server Specifications

	Web Server	Database Server	Python Server
Operating System	Windows Server 2012 *Upgrading to Windows Server 2019 in next 6 months*	Windows Server 2012 *Upgrading to Windows Server 2019 in next 6 months*	Windows Server 2012 *Upgrading to Windows Server 2019 in next 6 months*
Processors	Intel Xeon 2.50 GHz 4 Processors	Intel Xeon 2.50 GHz 2 Processors	Intel Xeon 2.50 GHz 3 Processors
Memory	16 GB	8 GB	16 GB

Note: The above servers are supporting 12+ EROS Science projects. MOWR is equivalent to 1 Science project

Implementation Planning

September Training: Product Topics

- **Who will install the python code and scheduled tasks?**
  - *Will run on laptops after return. No server to install*
- **Will the python code be installed on the website server or a separate server?**
  - *See above*
- **Will the Python code be setup and fully operational before the February Website training?**

February Training: Website Topics

- **Will website run on public server?**
  - *Will be requesting a new server after return*
  - *Will be different than current public website. Not sure where it will be hosted*
  - *Will keep as password protected*
  - *Disk: Should plan for 10 TB.*
    - *Total: 10 TB*
    - *Landsat full country: 2-5 TB*
    - *Web products: 64 GB base / 20 GB per month*
- **What is the domain for the website?**
- **Will the IIS or Apache web server be used?**
- **Will the website remain password protected?**
- **Due to Internet issues, should MOWR run an internal and external website?**
  - *No Intranet in between their departments*