- MapX Basic Concepts

June 2021

Basic Concepts – MapX

What is?

- MapX is an online open-source application for spatial data visualization

- It is hosted on a Swiss cloud infrastructure

- It is currently available in five languages (English, French, Spanish, Dari & Pashto)

- No programming capacity is required for accessing geospatial data, conducting data analysis, and building story maps

- MapX has been optimized for low Internet bandwidths and connectivity

- MapX has been developed following interoperability standards
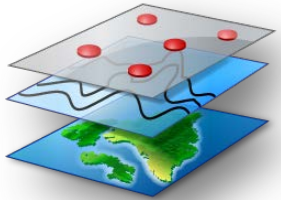
What can be displayed?

- Spatial data stored in the MapX database (vector)

- Spatial data streamed from external sources (raster and vector)

- Statistical data and charts associated to the geospatial data

- Products for story telling based on spatial data, text, images, videos and whatever other content is needed (story maps)

mapx

story map

Basic Concepts – MapX

What is a source layer in MapX:

- Spatial data that can be displayed through the use of views

- A source layer can be stored in MapX (vector layer)

- External repositories (vector and raster layers)

- New vector sources are added through MapX UI and their metadata is managed by their publisher

What is a view in MapX?

- Object that can be selected for visualization through the MapX web interface
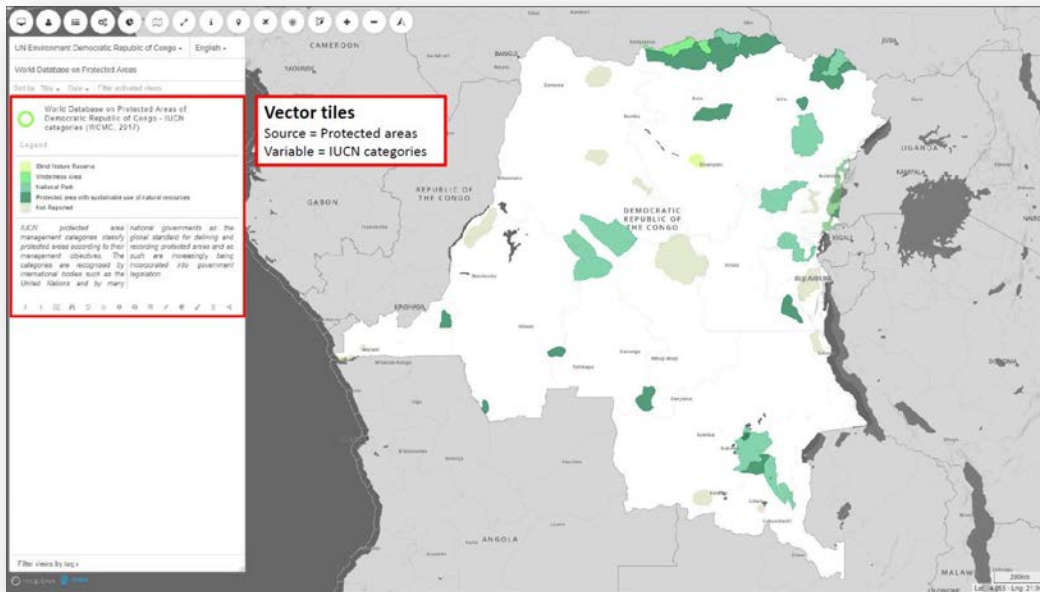
Link between a view and a source layer

- A view is strictly related to one source layer

- Metadata of the source layer can be consulted from view's properties

- If the license/source permits allows it, the source layer can be downloaded from the view
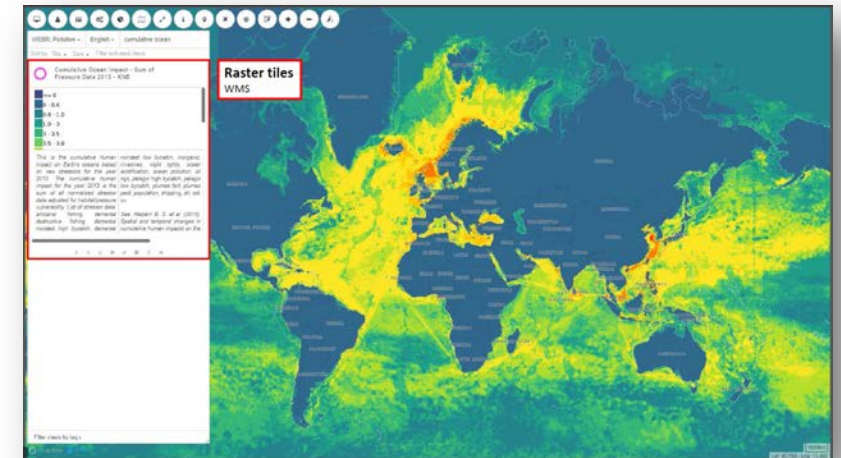
Basic Concepts – MapX

Vector

- Visualization of a vector source layer stored in the MapX database

- A custom style can be created (& edited) with a quick and easy tool

- Multiple functionalities available: access to the attribute table, data download, overlap analysis, filters, time-slider, transparency

Raster

- Raster datasets cannot be stored in the MapX database

- Raster datasets can be fetched via WMS (Web Map Service) or WMTS (Web Map Tile Service) queries

- If available, the legend can be fetched via a GetLegendGraphic query

- Style can not be edited in MapX. Functionalities are considerably reduced for raster tiles compared to vector tiles
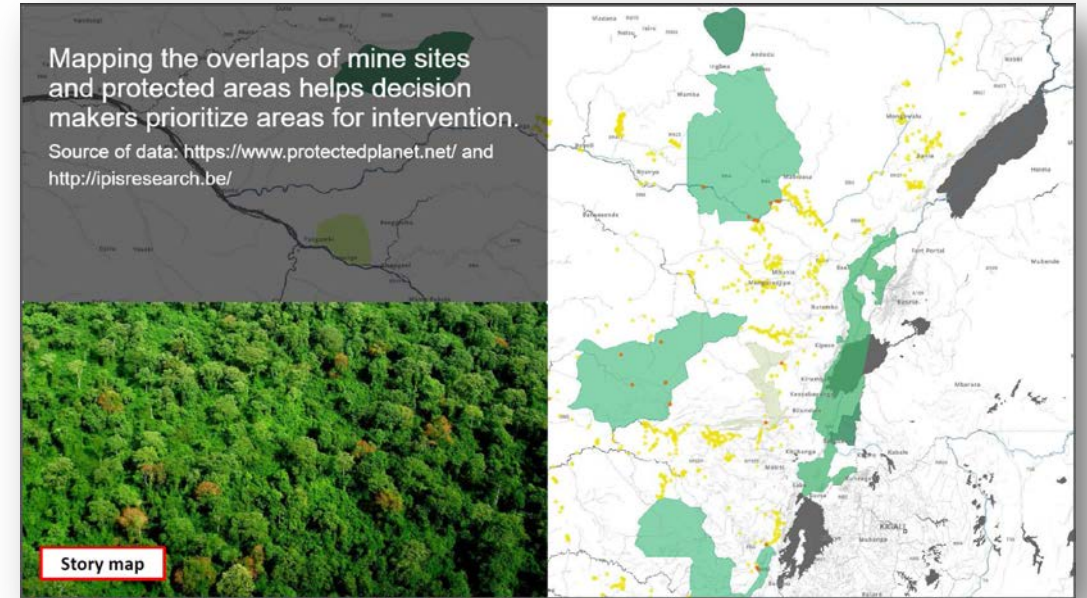
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Custom Code

- Advanced type of view where the user codes its own view and legend

- Requires programming skills (JavaScript, HTML, CSS, Mapbox)

- High flexibility and up-to-date data streaming

Story Maps

- Visualization of an ensemble of data, among which views, for telling purposes

- Spatial data, text, images & videos can be used to build a story map

Basic Concepts – MapX

Projects

- MapX offers dedicated environments called "Projects" where users can find geospatial data

- Related to a theme (e.g. biodiversity), a convention (e.g. Minamata), an institution /organization (e.g. UN Electric) or a specific location (e.g. Haiti)

- Can be directly managed by MapX partners or by the MapX Team and can be public or private

- User rights can be set per project

Users

- MapX features multiple and flexible user access levels to datasets, analytical tools as well as data sharing and publication features

- The user management system is secure and offers an incremental approach for each user category

- Each user is assigned a role that defines its access to the application's different components

- Roles are assigned by projects: Public Users, Members, Publishers, Administrators
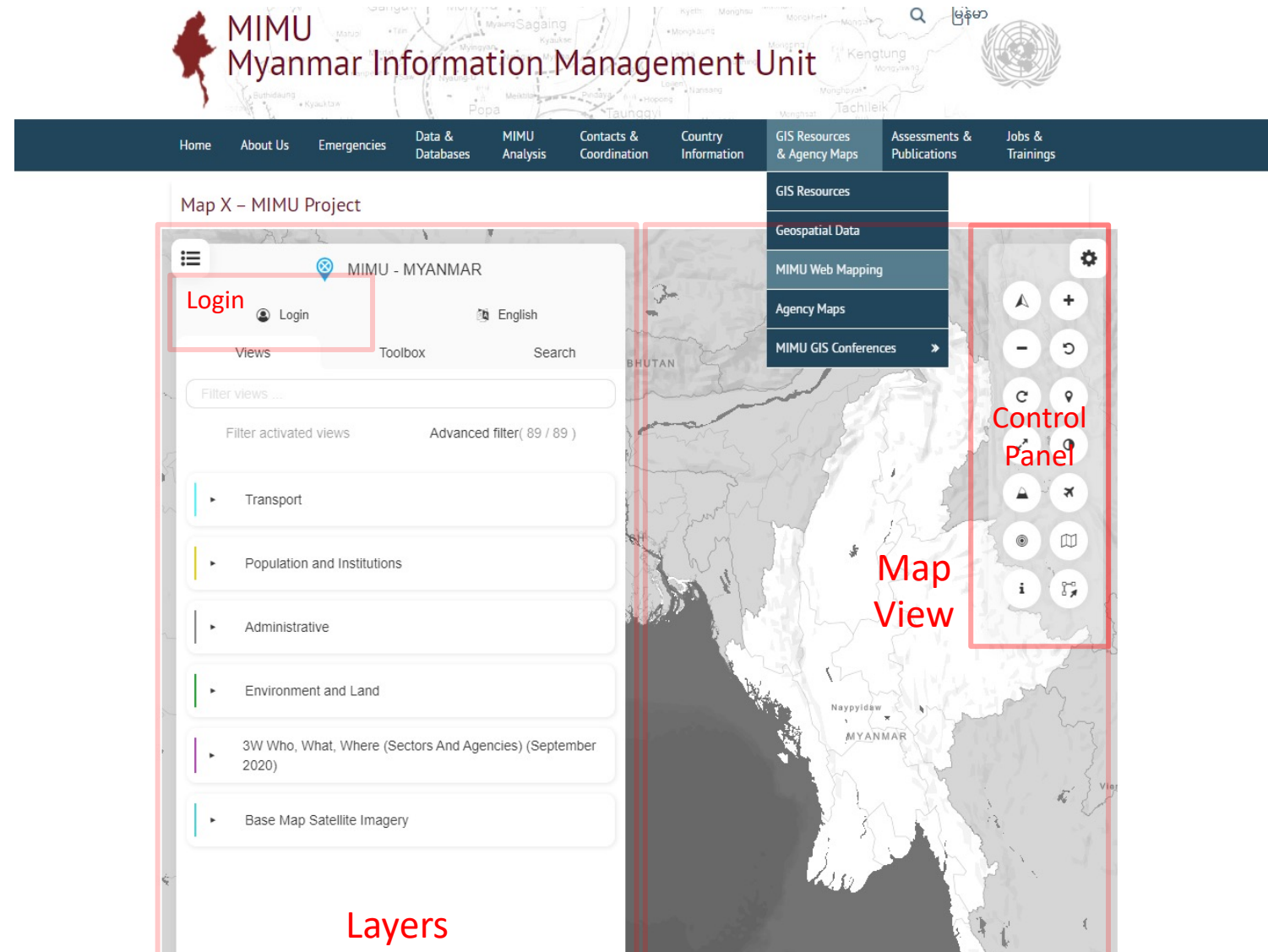
MIMU - MapX

Map X is already integrated into MIMU website

Under the section:

➢ GIS Resources & Agency Maps
  ➢ MIMU Webmapping

  https://themimu.info/mimu-mapx

• If the user needs to download available layers, must login

• For that, Click in "Login", enter the mail account and immediately the user will receive a code in the mailbox to enter

Basic Concepts – Contents of Technical Explanation

- Access to MapX into MIMU Website
- Explanation of the panels
  - Layers
  - Map
  - Control Panel

- Panel Layer
  - Explanation Categories
  - Turn on/off layers
  - Tools of layers

- Map composer

- Login. How to login
  - Benefits of login
    - Create of layers (point, line, polygon)
    - Download specific layers. Notification panel and send to mail
    - Where to download geospatial data

- Explanation of Toolbox