COP TOOL 2.0

AUTHORS

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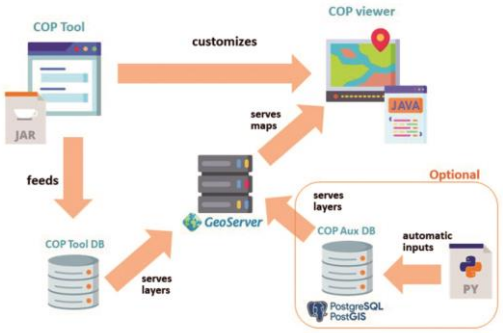
ACCESS/DOWNLOAD AT

https://github.com/MANIFESTS-DSS/



APPLICATION AND USE

Purpose/objective of the tool

COPTool helps manage marine pollution incidents by integrating and organizing key data from multiple sources. It lets managers quickly create tailored COPs, showing only relevant info to each user. New features include a tactical GIS module, dashboard, info sheet generator, and integration with Exercise and Knowledge tools. The system is containerized with Docker for easy deployment.

Applications of this tool

- Crisis management and decision making
- Operational response
- Training and exercising
- Communication

How to use it

Before a contingency, managers upload WMS layers and set user roles (viewers, contributors, managers). During an incident, a COP is created with selected layers and linked reports. Viewers access only authorized data; contributors upload new info (e.g., POLREP, SCAT). External systems (e.g., models, drifters) also feed data. A tailored COP can be deployed in minutes for efficient, role-based response.

Key features and functionalities

The system allows contingency managers to share critical info with key stakeholders, showing each user only data relevant to their role. It supports user management, SCAT and POLREP forms, alerts, photos, tactical GIS, and integration with Exercise and Knowledge tools. All features enable efficient, secure, and coordinated crisis response in a clear and user-friendly environment.

Practical examples where this tool can be used

COPTool has been implemented as an operational tool by the Galician Coast Guard. It has been used in dozens of drills and real incidents in recent years, enabling information sharing between the Coast Guard and other agencies such as Puertos del Estado and Sasemar. Additionally, it has demonstrated interoperability by exchanging data with external systems like Cedre's ARGEPOL, ensuring coordinated multi-agency response capabilities.

Results or outputs produced

The system is a web-based contingency manager supported by databases and map servers. These feed both data entry/management web apps and a web viewer, which is the main interface for end users. In short, it includes web apps for data input and management, a viewer for accessing information, and the necessary backend infrastructure to support both.

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TECHNICAL REQUIREMENTS

Operating system required

- Microsoft Windows
- Linux OS
- Android OS
- Apple iOS

Devices the tool can run on

- PC
- Tablet
- Mobile devices

Hardware requirements

A regular server

Integration with other software / systems / project tools

This tool integrates seamlessly with other project components such as the Knowledge Tool and the Exercise Tool. It has also demonstrated its ability to exchange information with external systems like Cedre's ARGEPOL, ensuring interoperability and enhancing coordination across platforms during contingency planning and response operations.

TARGET AUDIENCE

Target audience

- Authorities and companies with legal responsibility of implementing contingency plans
- Port and maritime authorities
- Coastguards
- Emergency responders (Civil protection, firefighters, army, police officers, etc.)
- Environmental managers

Knowledge background required

Users don't need extensive technical knowledge, but they should be individuals with responsibilities in crisis management.

ACCESS

Permissions required

The tool is open to the public.

USER GUIDANCE

User guides or manuals available

https://github.com/MANIFESTS-DSS/DOCUMENTS

Dissemination materials available, or materials in which this tool is featured

https://github.com/MANIFESTS-DSS/DOCUMENTS

UPDATES AND NEW FUNCTIONALITIES

In this new version, several enhancements are included: a new tactical GIS module for adding crisis response information, a new dashboard module, a new module for generating specific information sheets, and the integration of other tools such as the Exercise Tool and the Knowledge Tool. Additionally, the entire system will be containerized using Docker to facilitate easier installation and integration.

FEEDBACK

Support email

pmontero@intecmar.gal

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FREQUENTLY ASKED QUESTIONS

How does the user management system work in COPtool and what are the different types of user permissions?

The COPtool has two main user types: Administrator and User. Administrators have access to all modules and can manage users and information layers. Regular users have access only to specific modules assigned by the administrator. Various permissions can be granted, including COP Manager (managing information during contingencies), POLREP Reports Manager, SCAT Manager, Observer (for inspections), Strategy Map creator, and COP Viewer (with different confidentiality levels: low, intermediate, and high). Each permission grants access to specific functionalities within the system.

What are POLREP and SCAT reports, and how are they created and managed in the COPtool?

POLREP (Pollution Report) is a standardized report model used to collect initial information about marine pollution events. In the COPtool, users can create new POLREPs by filling in forms about observer data, meteorological conditions, pollution information (spills, sources, photos, comments), and geographical locations. SCAT (Shoreline Cleanup Assessment Technique) reports are used to document coastal contamination details. These reports include information about the coastal segment, inspection team, types of coastlines, operational characteristics, surface and subsurface hydrocarbon presence, and other contaminating substances. Both report types can include geolocated photos and comments, and once created, they're stored in the database for access by authorized users.

What are the main modules available in the COPtool system and what functions do they perform?

The COPtool includes several modules: Management Module (for user and geographic information management), COP Management Module (for handling information distributed during contingencies), POLREP Module (for standard pollution observation reports), SCAT Module (for coastal contamination assessment), Reports Module (for communications from response teams including photos and videos), and COP Viewer (for visualizing all geographic information). Each module serves a specific purpose in managing different aspects of maritime emergency response.

How can I share information during an emergency using the Reports Module?

The Reports Module allows quick communication between field teams and the coordination center. To create a new report, click the "+" button and complete the form with an optional title, message text, and attached files (photos, videos, PDFs). You can tag communications as "Alarm," "News," or "General" to help managers filter information. If you've been linked to a specific contingency by the COP manager, all your reports will automatically be visible to members at the coordination center. You can also geotag your reports by providing coordinates manually, using your current location, or marking a position on the map.

What steps should I follow to create a new COP during an emergency situation?

To create a new COP, access the COP Management module and click the "+" button. You'll need to complete several screens: first enter contingency details (name, start date, description), define the affected geographical area on a map, select relevant information layers, choose which users should have access, and set confidentiality rules. Once created, you can manage the COP by linking POLREP reports, SCAT assessments, photos, and strategic maps to provide a comprehensive view of the emergency situation.

How can I add geographic information and manage layers in the COPtool?

To add geographic information, you must have administrator privileges. The system uses Web Map Service (WMS) and organizes layers hierarchically into groups and panels. You can create new panels (via the panel menu), add groups to panels (using the group menu), and then add layers to groups. When adding a layer, you'll need to provide details like name, URL, projection, and boundary coordinates. These layers become available to COP managers who can select them during contingency management.

How do I navigate between different modules and features in the COPtool interface?

Navigation within the COPtool is done through the menu on the left side, which provides access to all modules you have permission to use. Common navigation elements include the "+" button to create new elements, search fields to find records, summary bars at the top to access different sections of forms and edit/delete options to modify or remove records. You can also use the "Next" buttons to progress through multi-step forms and return to the main dashboard to see your most recent data.

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