

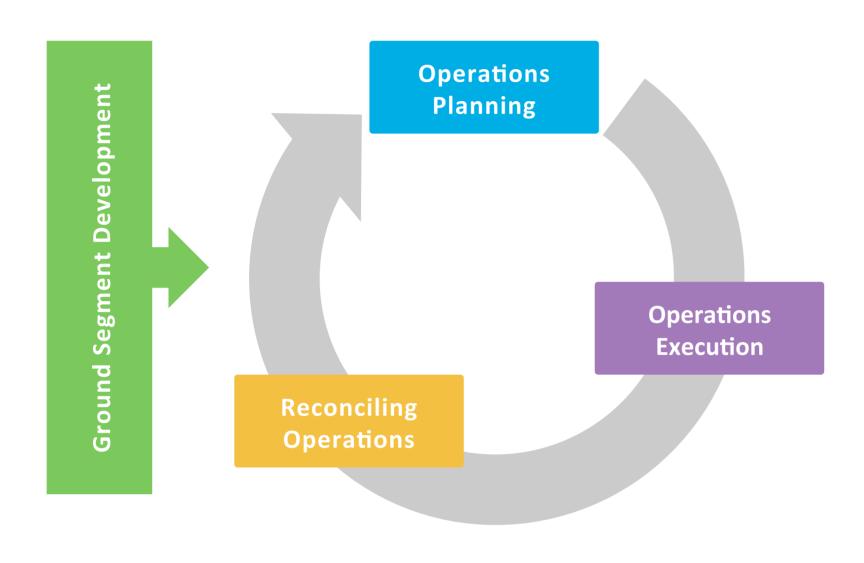
Integrated Collaborative Platform to Support Effective Mission Operations

WaveOps is a web-based collaborative platform, based on Apache's Wave in a Box, allowing real-time communication and offering an advanced and extensive capability to integrate with other tools.

The purpose of WaveOps is to provide the users with a common platform for collaboration and information exchange, which is closely connected to and integrated with the information source.



The Problem: Sharing Information



- Development and operations activities are based on complex interactions between teams
- Large number of communication means and tools:
 - Email, reports, minutes
 - Meetings, teleconferences
 - Web-based tools
 - System specific offline tools
- Knowledge is spread across different repositories in a number of different formats or not recorded at all
- Retrieval of consolidated information is difficult

The Process: Research and Prototyping



User Stories

Iterative approach with

Notification Service

Integration and External

Access and User Management

Search Engine

Interfaces

Core

potential users to identify and

define the main tool features:



Technology Assessment

Trade-off analysis of opensource and commercial collaboration tools:

- Tools based on Wave Federation Protocol
- Enterprise Social Networks
- Bulletin Boards



Prototype Design and Development

Prototype developed using Scrum methodology:

- 7 Sprints
- Product Backlog
- Retrospective and Planning Meetings
- Incremental deliveries and demos at the end of each Sprint



Use Case: WebMUST

Integration of WaveOps with WebMUST, web-based tool suite for data analysis.

- Data annotation capabilities
- Link to new/existing discussions
- Display of existing discussions for a specific graph/parameter

The Solution: WaveOps

The WaveOps prototype is based on **Wave In A Box**, an Apache's open source project.

Key Points of the design:

- Metadata, set of technical information describing the context of a discussion
- Dependency Inversion, allowing discussions to be created and augmented from the information source

