

NATO Communications and Information Agency Agence OTAN d'information et de communication

# **LOGFAS APPLICATIONS AND MODULES**

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Issued by: OR-9 Simon MAUNOURY – Mr. Marius ROFEL

NCIS SSBA LAS

Approved by: Mr. Jan-Willem GOOSSENS

NCIA SSBA LAS

# Document Version History

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This document provides an exhaustive list of all LOGFAS applications and modules, with a quick description of their role and utilization. The modules which does not provide directly functionalities for LOGFAS users, like replication or CCC, are described in the section called 'Other Modules'.

## 1. LCM (LOGFAS CONNECTION MANAGER)

Application for managing local and remote LOGFAS and LOGFAS+ databases. It also provide the ability to update the versions for SQL, GeoLocs, Asset Types, RICs, Nations, Capability Codes and HNS.

# 2. LDM (LOGFAS DATA MANAGEMENT)

The LDM (LOGFAS Data Management Module) is part of all three application suites M&T, LOGREP and ACROSS.

LDM is used to populate in the database all tables related to forces and their holdings and status, equipment, transportation assets and plans. All these elements are common to all LOGFAS functions.

LDM is also capable of exporting/importing data in XML format, which represents the main method to pass data within LOGFAS communities which are not connected to a server-based database. In addition, there are data transfer files that can be exchanged between TOPFAS and LOGFAS.

LDM provides Logistic Reporting (LOGREP) functions, working with relevant data elements as RICs, NICs and RIL etc.

# 3. <u>UMM (USER MANAGEMENT MODULE)</u>

User Management Module is the users, roles and groups management tool for the LOGFAS Logistics Functional Area Services applications.

It provides user access for various LOGFAS Logistics Functional Area Services applications and is only relevant on the server side installation of LOGFAS Logistics Functional Area Services.

On the client side, the user does doesn't need to configure UMM User Management Module, this is automatically bypassed.

Via this tool you can:

- 1. Add/remove users and to assign them to one or several groups and roles,
- 2. Add/remove permissions and data access (to profiles, DDP Detailed Deployment Plans, missions and nations) to one or several groups
- 3. Approve client's attempts to remotely connect to the server databases (since version 6.3).

# 4. GEO MAN (GEOGRAPHICAL MANAGER)

It is a subsystem of the LOGFAS used to populate the database with geographical data requirements and to provide mapping and other geography related services.

Briefly, the GEOMAN Tool is an application that can be used to:

- 1. Set up and view maps.
- 2. Set up and view map layers.
- 3. Set up geographic locations e.g. maritime ports, air ports, RSOM locations.
- 4. Define infrastructure: The facilities where forces and goods are loaded to, or off-loaded from, transportation assets when a change of transport mode occurs. Infrastructure locations are mainly defined by their throughput or handling capabilities. facilities, e.g. berths, runaways, RSOM support facilities.
- 5. Establish Air, Inland Waterway (IWW Inland Waterways.), Pipeline, Rail, Road and Sea networks,

- 6. Display the location of the units loaded from force profiles and their inventories,
- 7. Measure and analyse distances.

#### 5. ADAMS (ALLIED DEPLOYMENT AND MOVEMENT SYSTEM)

ADAMS provides a comprehensive set of automated and integrated decision support tools for the planning and analysis of NATO force deployments.

The system assists movement and transportation planners in developing deployment plans and in testing their feasibility by enabling the rapid preparation, de-confliction and dissemination of deployment plans between Nations and NATO commands.

The main features of ADAMS are:

- 1. The relational database, storing information on the characteristics of military equipment, the military forces and their holdings, the transportation assets and missions, the geographical infrastructure and the deployment/redeployment plans;
- 2. The proprietary geographical information system for displaying information on actual map backgrounds;
- The software applications to plan, analyse, coordinate the movement and transportation of military forces.

# 6. EVE (EFFECTIVE VISIBLE EXECUTION)

The EVE module provides visibility and assists with the short term planning and execution of movement and transportation of military assets during multinational, coalition operations via Air, Land, or Sea.

The DDPs developed in ADAMS are converted to Flow Execution Plans when loaded into EVE, in order to coordinate the execution of the movement and transportation of the forces.

#### 7. EVE DATA LOADER

This module, designed only for LOGFAS servers, allows to import data for M&T Execution through Email. It requires to have an Exchange Server configured on the server.

# 8. CORSOM (COALITION RECEPTION STAGING AND ONWARD MOVEMENT)

The overall objective of the Coalition Reception Staging and Onward Movement (CORSOM) is to improve planning and execution of the Reception Staging and Onward Movement (RSOM) of deploying personnel, equipment and supplies during coalition operations.

The use of CORSOM leads to a smooth RSOM process, reduced logistic response time during sustainment operations, improved throughput in transportation networks, and improved visibility of the status and capability of deploying coalition forces.

#### 9. SPM (SUSTAINMENT PLANNING MODULE)

The purpose of the Sustainment Planning Model application is to give NATO and national planners a way to:

- 1. Calculate sustainment requirements for operations,
- 2. Check the sustainability of a given set of units in a given time interval,
- 3. Calculate the packaging requirements for the sustainment of a set of forces assigned to an operational plan and

4. Support the calculation of strategic stockpile planning (all material and items used to equip, resupply and maintain the military forces, other than battle-decisive munitions).

## 10. SDM (SUPPLY DISTRIBUTION MODEL)

SDM is intended as a decision-support tool, allowing logistics planners to test an operational resupply and sustainment policy for a range of "what-if" scenarios.

SDM is part of LOGFAS (Logistics Functional Area Services) and builds on the data used by ADAMS, SPM and ACROSS.

#### 11. ACROSS MODULES:

#### 11.1 AGMEM (Air-to-Ground Munitions Expenditure Model)

AGMEM is one of several models developed for the <u>AC</u> Allied Commands Resource Optimisation Software System (ACROSS).

The goal of AGMEM is to support the quantification of 'adequate stocks'. It determines these 'adequate stocks' only for Battle Decisive Munitions (BDM).

#### 11.2 ADMEM (Air Defence Munitions Expenditure Model)

ADMEM is an integrated air defence model combining air-to-air and surface-to-air air defence munitions requirement calculations in one methodology. By doing so, it captures the synergy between different categories of air defence assets.

The strength or weakness of the friendly force package in one category will influence the requirements of another in ADMEM. ADMEM also distinguishes high quality shooters and targets from the low quality ones. This makes ADMEM suitable for calculating 'smart' munitions requirements.

#### 11.3 LEMEM (Land Forces Equipment and Munitions Expenditure Model)

LEMEM is one of several models developed for the AC Allied Commands Resource Optimisation Software System (ACROSS). The goal of LEMEM is to support the quantification of 'adequate stocks'. It determines these 'adequate stocks' only for Battle Decisive Munitions (BDM).

For LEMEM to calculate appropriate stockpile levels, the input data Basic Loads and Consumption Rates need to be inserted in the software tool SPM. This data is used in ACROSS to calculate the Basic Fill, Post Fill and Level of Effort requirements

# 11.4 MARMEM (Maritime Munition Expenditure Model)

The Maritime Munition Expenditure Model (MARMEM Maritime Munition Expenditure Model) is a mathematical combat model designed to help generate stockpile guidance for munitions used by "threat-oriented" weapon systems.

A weapon system is called "threat-oriented" when its purpose is to defeat a specific and limited "threat" (represented by powerful enemy weapon systems) and when shooting stops after that threat is eliminated. The current maritime threat consists of missiles, airplanes, ships, and submarines

# 12. EVE WEB (EFFECTIVE VISIBLE EXECUTION WEB APPLICATION)

The EVE WEB module provides visibility and execution coordination of movement and transportation of military assets during multinational, coalition operations via Air, Land, or Sea.

The purpose of the EVE WEB is to give LOGFAS users a tool for Effective Visible Execution of asset movement plans:

- 1. The goal is to improve movements' management during force deployment, transportation for sustainment, roulements and redeployment:
- 2. EVE supports the review, prioritization and co-ordination of national movement and transportation, and provides visibility of the overall multinational movement overview,
- EVE WEB works in a browser that connects to an internet address, whether the user is in HQ or deployed,
- 4. EVE WEB establishes live and shared data on both secure Internet, and other networks.

# 13. ADAMS WEB (ALLIED DEPLOY. AND MOV. SYSTEM WEB APPLICATION)

ADAMS Web is the intuitive web component for providing immediate access to the overview of Strategic Development for personnel, equipment and supplies during combined operations.

It provides a read only tool to observe and follow for strategic deployment/redeployment process with an enhanced user friendliness.

#### 14. OTHER MODULES:

### 14.1 CCC (Corsom Chat Component)

The CORSOM Chat Component allows CORSOM users ("CJ4 watch keepers"), to share Alerts via JChat with other users, in particular JOCWatch users ("CJ3 watch keepers"). The CJ3 watch keeper can then choose to import or ignore the alert.

#### 14.2 M&T64bit (Movement & Transportation 64bits)

This modules allows to run EVE and CORSOM modules with 64bits executable runtimes.

#### 14.3 LOGFAS-MS (LOGFAS Mediation Service)

The mediation service (LOGFASMS) forwards track updates, provided by NIRIS, to the LOGFAS database and is able to link the track update to a predefined mission.

A track update is a position update in time of a single vehicle (truck, aircraft etc.) or (convoy) mission and consists of a position (latitude, longitude), time, the transponder identifier, originator and some additional data if available.

#### 14.4 Replication Service

The replication process is a software module that enables data exchange between LOGFAS databases across different LOGFAS nodes/servers. LOGFAS replication is carried out automatically in real time.

Replication works from one server (Master) to many clients (Slaves) or vice versa, but each connection is configured separately.

#### 14.5 OpenSSL

This additional tool encrypts the ODBC connection between LOGFAS server and clients.