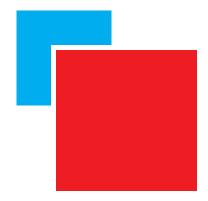




MEMBER OF ICZ GROUP



ICZ LETVIS® - ATCT Air Traffic Control Tools

CENTRAL SAFETY NETS ALERTS CALCULATION AND DISTRIBUTION

THE ICZ LETVIS® ATCT PRODUCT (AIR TRAFFIC CONTROL TOOLS) IS A SYSTEM DESIGNED TO CENTRALLY IDENTIFY POSSIBLE CONFLICTS BASED ON CURRENT SURVEILLANCE AND PLANNING INFORMATION.

The ICZ LETVIS® ATCT product is designed to provide central identification of targets, and conflict prediction and identification. It enables the calculation of Safety Nets alerts from current air traffic planning information and airspace management (ASM) information. The planning and ASM information is acquired from the ICZ LETVIS® FDP system (and from ICZ LETVIS® ASM in special cases), and the air situation in the form of system tracks from the ICZ LETVIS® MST system, or from a different logical server providing system tracks.

[BASIC FUNCTIONS]

ICZ LETVIS® ATCT Tools provides main and support functions.

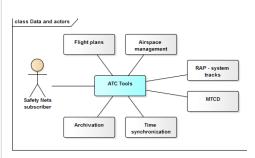
Main functions:

- Calculation and distribution of alerts about possible aircraft collisions in the air
 - STCA (Short Term Conflict Alarm) aircrafts getting too close.
 - MSAW (Minimum Safe Altitude Warning) -minimum altitude.
 - APW (Area Proximity Warning) entry into forbidden airspace.
 - DAIW (Danger Area Infringement Warning) entry into dangerous airspace.
 - LBA (Level Bust Alert) altitude deviation from CFL.
 - NCW (Non-Conformance Warning) deviation from the flight plan.
- Distribution of medium-term alerts about possible conflicts
 - MTCD (Medium Term Conflict Detection) medium-term conflict.

Support functions:

- Management and control client
 - Supervisor position
 - Technician position
- ▶ Main/fallback system
- Current activity monitoring
- Data archiving and logging
- ▶ Time synchronisation
- ▶ Simulation support









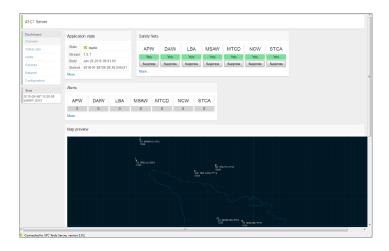


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[ICZ LETVIS® - ATCT]

ICZ LETVIS® ATCT enables conflict identification based on EUROCONTROL rules. It is based on a server-client architecture. The server performs the complete calculation and alert distribution. The management client (supervisor) allows individual conflicts to be switched on and off. The control client (technician) is designed to provide detailed analysis and monitoring of the current state of the calculations.



■ APPLICATION SW AND OPERATING SYSTEM

OPERATING SYSTEM	LINUX SLED/SLES 12 (X64) AND HIGHER
Application SW	The ICZ LETVIS® ATCT SW product family includes: ATCTser process
	▶ ATCTccl-r management client
	► ATCTccl-t control client
	► ArchDrec process

■ HARDWARE AND TECHNICAL PARAMETERS

Basic HW	HP/DELL/COTS – INTEL platform
LAN	Ethernet, TCP/TCP, UDP/IP
Programming language	QT, C++
Client interface	Web
Input data protocol	ASTERIX cat 62 ALES-stream - FDP (XML) ALES-stream - ASM (XML)
Output data protocol	ALES-stream - ATCT (XML)
Maximum targets	2047
Supported conflicts	STCA, MSAW, APW, DAIW, LBA, NCW, MTCD
Backup support	Yes

COMMERCIAL CONTACT

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