

Product and services: ARTAS

EUROCONTROL's ATM surveillance tracker and server

ARTAS is one of the most advanced and successful surveillance data processing systems in the world. Almost every European state uses ARTAS as its surveillance tracker for en-route and approach applications. Available as a turnkey solution from Frequentis Comsoft, ARTAS processes surveillance data reports from primary, secondary and Mode S radars, wide area multilateration systems and ADS-B data sources to establish a coherent and accurate air situation picture for a wide range of users.

Key features

High reliability and accuracy

The system enables interoperability and seamless operation by ensuring a common high accuracy of the air situation picture based on all surveillance technologies.

Supported surveillance data sources

ARTAS processes PSR, SSR, CMB, Mode-S elementary and enhanced, 3D radar, ADS-B feeds and multilateration data.

Range of track services

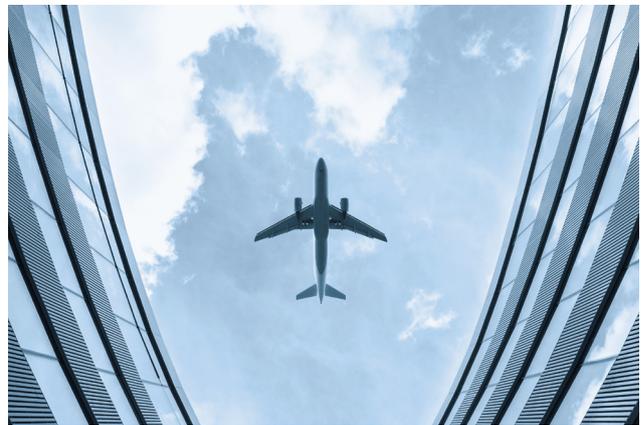
ARTAS provides periodic and radar-synchronised track services, as well as asynchronous complementary track services and immediate update feeds.

Many areas of application

ARTAS is for example intended for en-route, TMA and approach control.

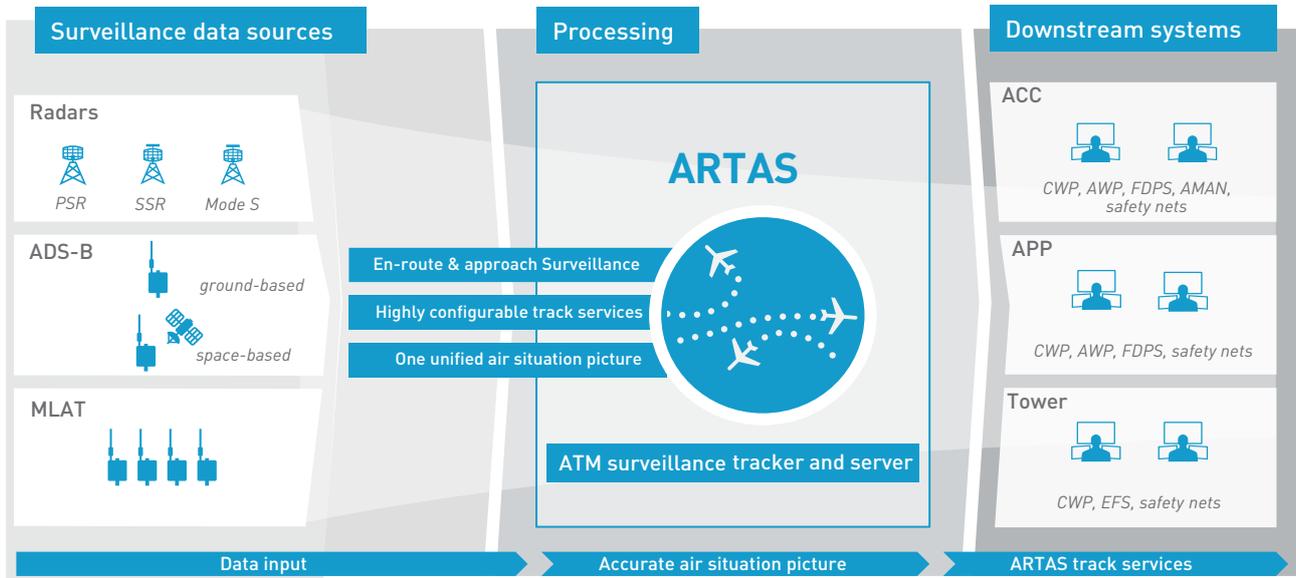
Comprehensive service portfolio

Frequentis Comsoft is EUROCONTROL's industrial partner for CAMOS, and offers turnkey ARTAS installations, ARTAS trainings and tracker tuning.



ARTAS at a glance

- Best-of-class surveillance tracker for en-route and approach applications
- Used by almost all European ANSPs
- Proven quality and performance
- High accuracy and reliability
- Coherent surveillance coverage
- Seamless redundancy
- Centralised maintenance and support
- Under constant development to meet upcoming requirements



Benefits

De facto standard

ARTAS enables interoperability and seamless operation by ensuring a uniform high accuracy for the air situation picture based on all surveillance technologies. Based on its architecture, ARTAS permits to separate the tracking functionality from the data server functionality, enabling powerful dedicated services for each of the ATC/ATM users, including customised services for TMA approach and en-route users or any of the safety net and metering applications.

As the de facto standard in Europe, ARTAS offers the potential to defragment system topologies as well as airspace, as ARTAS capacity is ready for the larger airspace volumes that constitute functional airspace blocks.

Centralised maintenance and support

ARTAS is backed by a powerful support infrastructure, the Centralised ARTAS Maintenance and Support Service (CAMOS) at EUROCONTROL for which Frequentis Comsoft has been EUROCONTROL's industrial partner since 2001. This is complemented by services for ARTAS turnkey installations, standardized training programmes and ARTAS tuning and performance assessment.

The EUROCONTROL ARTAS tracker is under constant evolution to meet the required levels of functional performance, and the CAMOS service enables a very efficient approach with a centralised, common roadmap development and the regular provision of baseline software versions.

Facts and figures

Deployment	ARTAS tracks close to 90 percent of all European flights at 43 air traffic control centres around 100 ARTAS units are currently deployed
Data formats	ARTAS employs ASTERIX as universal I/O format (categories 01, 02, 48, 34, 21, 23, 20, 19, 30, 31, 32, 62, 63, 65, 252)
Tracking technology	Multiple Sensor Variable Update Tracker, EKF, JPDA, IMM, MHT, MSEA, DAP processing
Scalability	ARTAS supports up to 255 surveillance data sources, 20+ simultaneous track services, up to 32000 concurrent tracks

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