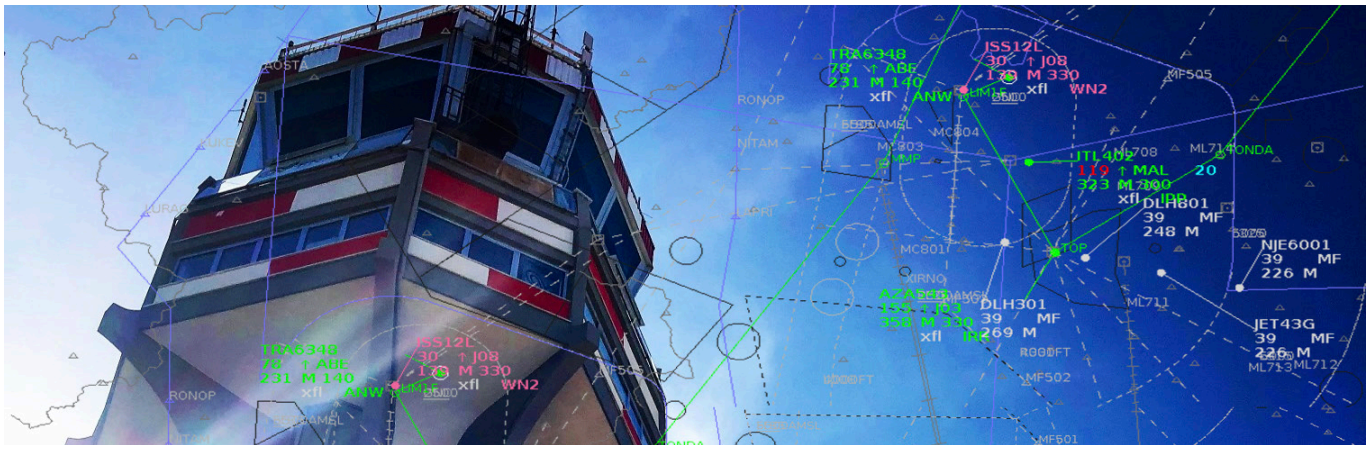
TWR e-CWP - TWR Enav Controller Working Position

The all-in-one solution for air traffic management, designed by ATCOs, driven by experience.

Mission:

Effective situational awareness is a key-factor for safety in modern ATC. TWR e-CWP provides the HMI for the visualization and interaction with FDPs Systems in a TWR environment. Its flexibility and scalability offer to the customer a large set of customizable functions in order to satisfy operational needs ranging from small to large air traffic scenarios.



Operational Scenario:

TWR e-CWP is able to receive flight plans from FDP system and to create a link between such systems and the surveillance data. In this way information are shown in an integrated HMI, allowing the control of all the data flow in an intuitive ad usable way.

The HMI mainly designed for the visualization of flight data matched to associated aircraft targets. Its flexibility and scalability offer to the customer a large set of customizable functions and different ways to interact with a TWR FDPS in order to satisfy operational needs in all tower types, small medium and large, according to the level of air traffic.

Key benefits:

- TWR e-CWP is the result of a continuous and strict collaboration with the Italian Air Navigation Service Provider (ENAV). Significant Flight Data received from TWR FDPS (e.g. ARCID, ADEP, ADES, Wake turbulence) are represented on Radar Labels.
- TWR e-CWP is flexible and scalable and allows integration of different components based on the operational needs, allowing an easy adaptation of the product to the customer needs by tailoring of the functionalities to be provided and the best configuration for the destination environment.
- High portability thanks to Java Language and integration with TWR FDPS and e-AWOS systems.

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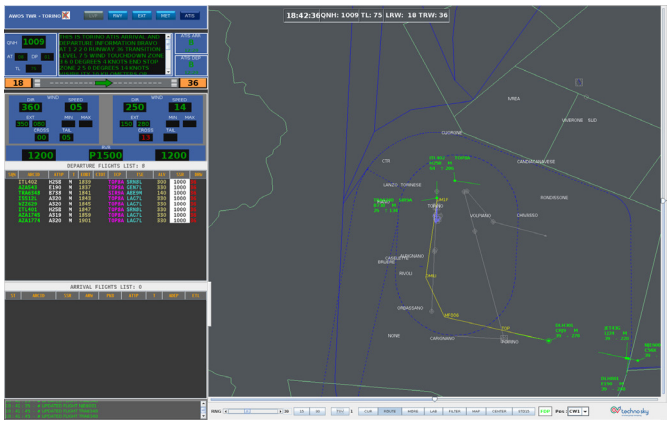
Main technical features and overview:

- Significant Flight Data received from TWR FDPS (e.g. ARCID, ADEP, ADES, Wake turbulence) and represented on Radar Labels.
- High Configurability of screen layout, to provide different data views
- High Configurability of Radar Labels layout, size and colours
- Flights List can be added to enrich the air traffic situation on radar display
- Radar Labels commands immediately accessible to the ATCO through mouse clicking
- Customizable Shortcuts, from radar labels to ATC specific orders
- Radar Labels/Flight List integrated hooking
- Airport Runways Scenario displayed and integrated with meteorological data coming from e-AWOS System
- Selection of different layers of maps to be shown
- Integration with a wide set of ATC Orders
- Dynamic Role (e.g.: Planner/Executive or Supervisor ATC) configurability

TWR e-CWP applications

- TWR Control: TWR e-CWP is suitable for the integration with any FDP system and is compatible with standard surveillance data formats. It also provides a useful tool for the TWR control.
- Prototyping: considering the configurability of the TWR e-CWP, it can be successfully used for studying different solutions for data distribution on the screen and different ways of interaction and integration.
- Training: TWR e-CWP is integrated in the e-ATOMS suite for operational personnel training. Anyway, it can be integrated with different simulation platforms for training.
- Testing: considering the high configurability and ease of use, the TWR e-CWP can be useful to build fast test beds for testing of different platforms.



Interfaces:

- ASTERIX Surveillance data CAT010, CAT021, CAT034, CAT048, CAT062, CAT063, CAT065
- e-AWOS System Interface
- SVG (Scalable Vector Graphics) multi-layer maps

Technical Specification:

- Developed in Java Language
- Windows OS and Linux OS workstations

Regulations and certifications:

- Developed according to ENAV Safety Management System and Security Policy
- CMMI Compliant Development Cycle
- Developed according to the Software Assurance Level 3 (SWAL 3 compliant)
- EATMN Constituents certified by DSU (Reg. (EU) 2018/1139)

Support:

- Operational Personnel Training Purposes through the integration with e-ATOMS SUITE
- Easy to develop a e-CWP prototyping to meet customer's requirements