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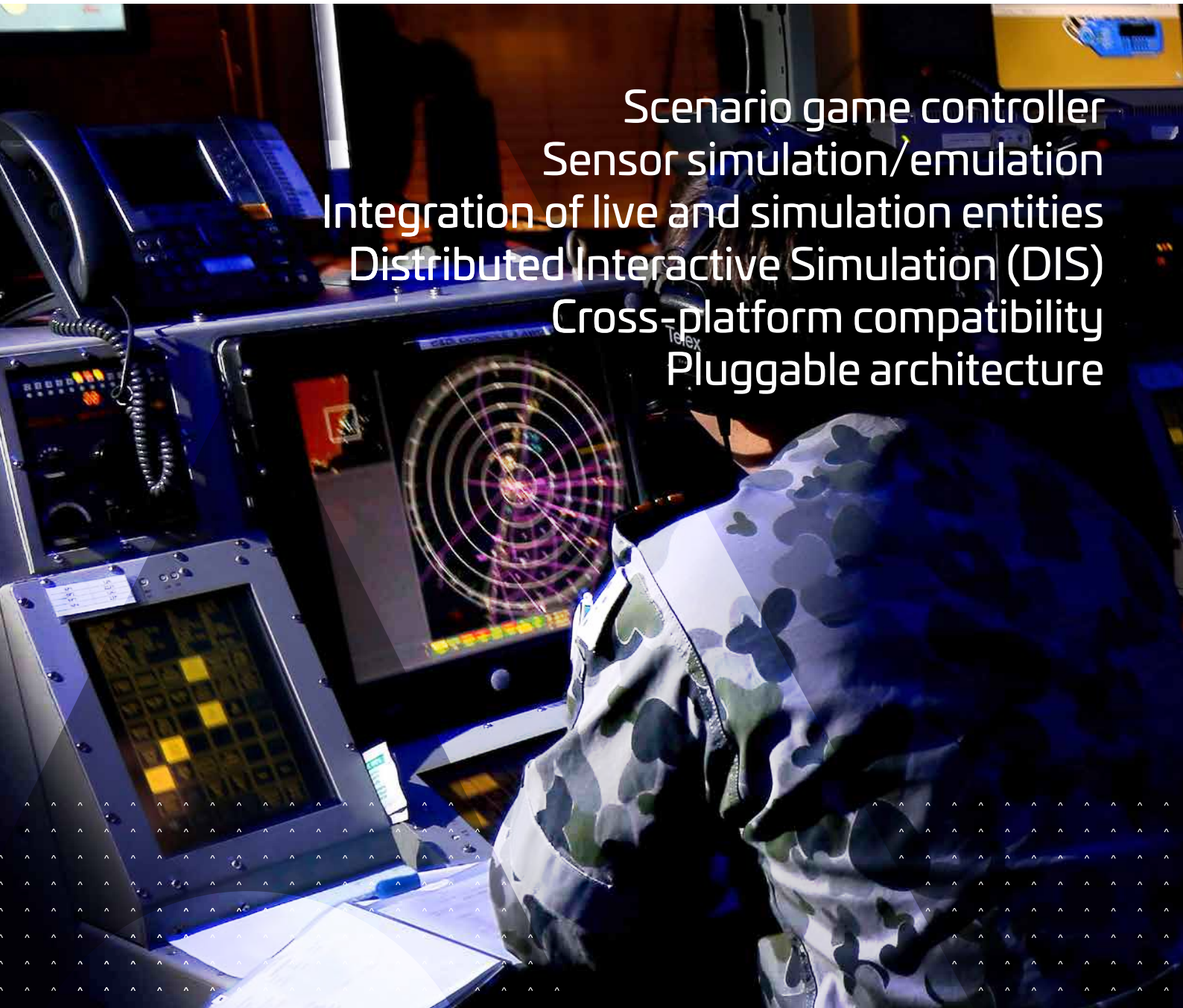
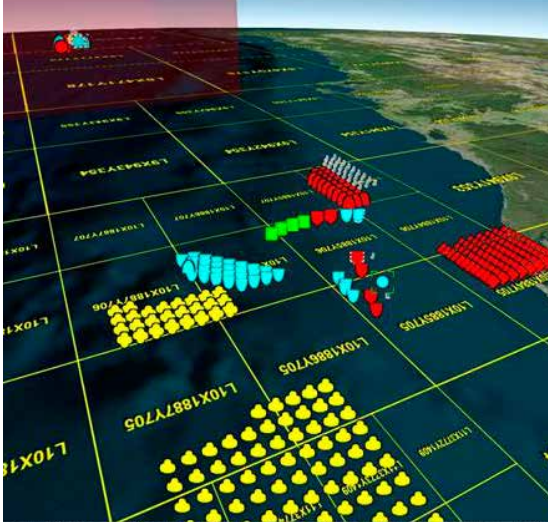
TrackSim
Simulation & Training engine



Scenario game controller
Sensor simulation/emulation
Integration of live and simulation entities
Distributed Interactive Simulation (DIS)
Cross-platform compatibility
Pluggable architecture

TrackSim
Simulation & Training engine



TrackSim is a DIS compatible sensor and effector simulator, designed with a pluggable software architecture to allow new sensors to be easily integrated.

Standard features

- Create, modify and save scenarios
- Consume live track data from external sources
- Run-time scenario modification
- XML configurable platform types
- Low processor and memory requirements
- Cross-platform compatibility (Linux, Windows, Solaris and OSX)
- Produce and consume DIS data feeds
- Multi-site DIS capabilities
- Pluggable architecture allows customization of sensors and effectors.

Optional features

- Monitor scenario in secondary 3D geospatial monitoring application (suitable for big-screen viewing)
- HLAe Interface.

Sensors simulated

- ARPA – Distributed over serial or IP. Multiple allowed
- AIS – Distributed over serial or IP. Multiple allowed
- ADS-B – Distributed over serial or IP. Multiple allowed
- GPS – Distributed over serial or IP
- Radar paint – land and track hit plots. Distributed over IP
- TDL – Link 16 surveillance messages. Distributed over IP
- Sensors - Radar, Sonar, EW, IFF, INS, Helo Data Link.

Effectors simulated

- VLS (for ESSM, SM-2 and Harpoon)
- Missile Decoys
- CIWS.

Live sensor inputs

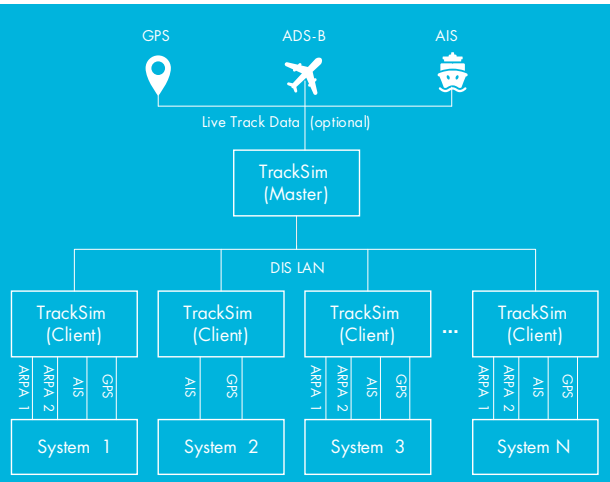
- Real tracks can be injected into the running scenario via AIS and ADS-B sensors
- GPS for scenario time source and ownship position.

DIS Capabilities

- Receive entities from multiple sites simultaneous
- Distribution of game to any number of UDP/TCP connections
- XML configurable mapping from DIS signature to TrackSim platform types.

HLAe Capabilities

- HLAe capable
- Receive entities via HLAe RPR2 POM.



Example Configuration

- Master TrackSim distributes the scenario to all client TrackSim applications via DIS
- Each client TrackSim can associate ownship to any DIS entity (can be same or different across all systems)
- GPS (sensor or recorded) can be used to set current time and position (can also be connected to each client)
- AIS (sensor, recorded or web-service) can be used to inject vessels into the scenario
- ADS-B (sensor, recorded or web-service) can be used to inject aircraft into the scenario.

7 Murray Rose Avenue, Sydney Olympic Park, NSW 2127, Australia.
Tel: +61(0)2 8037 6000 E-mail: sales@thalesgroup.com.au
> Thalesgroup.com <