

Quadrant NUQLEUS™ Flight Simulator Updates and Integration Solution

Quadrant NUQLEUS provides an innovative approach to interfacing new equipment with an existing host computer, facilitating flight simulator subsystems integration and updates.

UNIVERSAL INTEGRATION INTERFACE

By reducing the level of interference to integrate new technology with existing computer and hardware architectures, Quadrant NUQLEUS has facilitated updates to flight simulators with its proven and robust software designs.

The NUQLEUS solution provides ease of integration for additional or replacement systems including Visual Systems, UPRT, TCAS, I/O and interfacing to multiple devices on any flight simulator.

VISUAL UPDATES

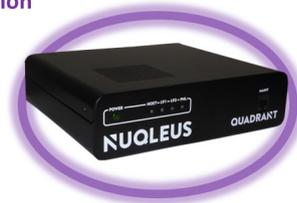
Quadrant NUQLEUS is installed on flight simulators worldwide as the host interface for new Visual System Image Generators and Avionics Updates and is qualified up to EASA CS-FSTD(A) and FAA 14-CFR Part 60 standards.

NUQLEUS interfaces image generators from multiple manufacturers to flight simulator host computers on current and legacy equipment.

NUQLEUS provides a visual environment simulation model and instructor control via the optional NUQLEUS Control Panel (NCP).

Quadrant NUQLEUS™ Software Configuration Options

- Visual Integration
- TCAS v7.1
- EGPWS
- SMGCS
- FMS
- GPS
- Instructor Control
- Additional IO



'Quadrant NUQLEUS provides a mechanism for adding additional capabilities including new avionics and UPRT'

AVIONICS UPDATES

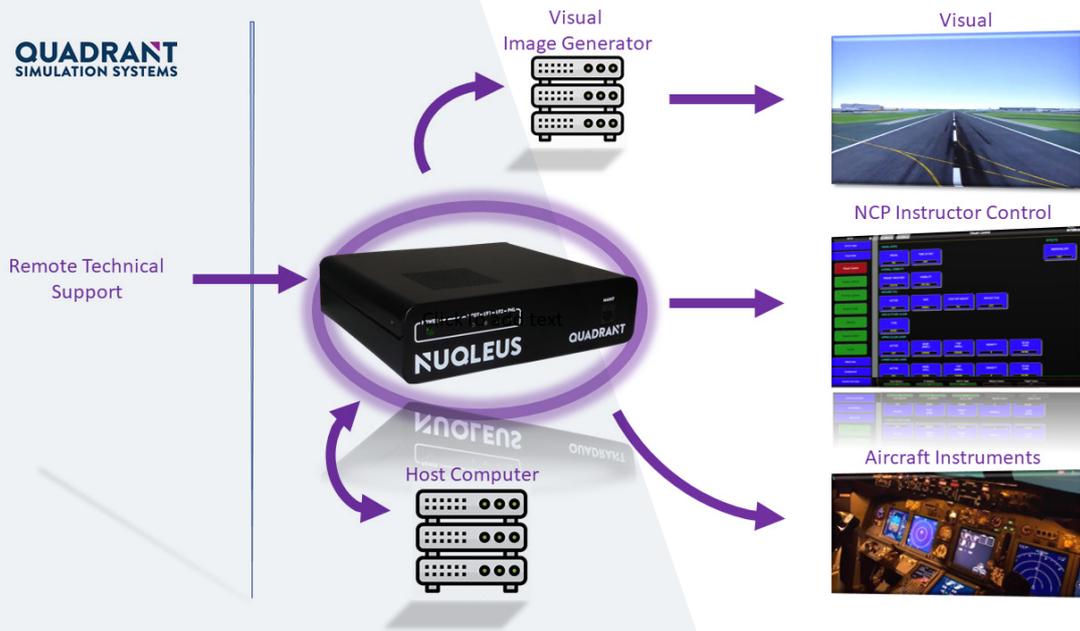
Aircraft avionics equipment are regularly updated and changed throughout the life of an aircraft. The flight simulator must retain commonality with these changes in order to be relevant as a training tool.

Quadrant NUQLEUS has been used to implement avionics update programmes to flight simulators including:

- ▶ FMS
- ▶ EGPWS
- ▶ TCAS
- ▶ EFIS

Where additional I/O capability is required to interface with aircraft and flight simulator equipment, NUQLEUS has been supplied alongside a COTS I/O platform which is integrated with the NUQLEUS software.

Quadrant NUQLEUS Flight Simulator Installation



EFFICIENT OPERATION

Quadrant NUQLEUS contains an embedded processing system capable of receiving a data feed from an existing host computer and adapting that data into a format compatible with the new equipment being added to the flight simulator.

Quadrant Simulation Systems maintains an extensive software library for Quadrant NUQLEUS which provides an efficient solution to implement multiple updates on a flight simulator either in a single project or over a series of updates.

By utilising these validated software designs, Quadrant NUQLEUS enables the integration of new equipment at a significantly lower cost and reduced schedule compared to traditional methodologies.

NUQLEUS CONTROL PANEL

An optional NUQLEUS Control Panel provides instant access to new system features such as visual system controls in the case of an image generator integration. NUQLEUS controls are published via a web page interface.

- ▶ Support on any tablet device or web browser enabled device
- ▶ Standard flight simulator IOS software & controls
- ▶ Provides control of all new system features
- ▶ Controls system features that are not supported by the existing IOS

FOR MORE INFORMATION CONTACT

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QUICK FACTS

- ▶ Designed for Flight Simulator Updates
- ▶ Multiple FMS, UPRT, IG's & EGPWS' Integrated
- ▶ Connects in-line to Host
- ▶ Reduced Integration Downtime
- ▶ Reduced Risk on Legacy Host
- ▶ Maintenance Free
- ▶ No Periodic Backup Required
- ▶ Provides Full Control Instantly
- ▶ Multiple Parallel Update Capability
- ▶ Plug & Play Options
- ▶ Commonality for Multiple Devices
- ▶ Touch Screen Panel (Optional)

ABOUT QUADRANT SIMULATION SYSTEMS

Quadrant Simulation Systems operates worldwide, delivering a comprehensive range of solutions tailored to the specific needs of the Civil Aviation, Defence and Security markets. Quadrant Simulation Systems Limited is part of Quadrant Group operating alongside other Group companies Micro Nav, Global ATS and Quest Flight Training.